

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

CALIFORNIA ENERGY COMMISSION
EN BANC HEARING
IMPLEMENTATION OF AB 1890

Wednesday
October 16, 1996
10:00 A.M.

1516 Ninth Street
Sacramento, California
Hearing Room A

REPORTED BY:

S. RICE

COMMISSIONERS PRESENT

CHARLES R. IMBRECHT, CHAIRMAN

SALLY RAKOW, VICE CHAIR

MICHAL C. MOORE

DAVID A. ROHY

JANANNE SHARPLESS

STAFF PRESENT

(Alphabetically Listed)

Jonathan Blees

Bill Chamberlain

Mike DeAngelis

Nancy Deller

Linda Kelly

Ronald Kukulka

Marwan Masri

Betty McCann

Dan Nix

Stephen Rhoads

Kent Smith

ALSO PRESENT
(Alphabetically Listed)

D.W. Aitken, Union of Concerned Scientists
Christo Artusio, Environmental Defense Fund
Vince Bartolomucci, San Diego Gas & Electric
Larry Berg, Ballard Power Systems
Michael Boccadoro, Ag Energy Consumers Association
Carl Blumstein, University of California
Traci Bone, Texas Ohio Energy; Davis Wright Tremaine
R.T. "Hap" Boyd, ZOND Corporation
Barry Butler, Solar Energy
Peter Carroll, Solar Turbines
Ralph Cavanagh, Natural Resources Defense Counsel
Lloyd Cluff, Seismic Safety Commission; Pacific Gas & Electric
Jim Cole, California Institute for Energy Efficiency
David Gamson, representing CPUC Commissioner Neeper
John Grattan, Miller, Karp & Grattan
John Guardalabene, Pacific Gas & Electric
Brent M. Haddad
George Hay, Electrical Power Research Institute
Herb Healy
Tom Hinrichs, Geothermal Energy Association
Lon W. House, ACWA
John Iannucci, Distributed Utility Association

ALSO PRESENT
(Continued)

Drake Johnson, SoCal Edison
Bob Judd, Biomass Energy Alliance
Stanley K. Kataoka, Pacific Gas & Electric
Richard Kelley, United Solar Technologies
Jamie Khan, Texas Ohio
Betsy L. Krieg, Pacific Gas & Electric
Marvin Lieberman, Electric Power Research Institute
Jane Luckhardt, Marron, Reid & Sheehy
Jody London, Working Assets
William V. Manheim, Pacific Gas & Electric
Chris Mayer, Modesto Irrigation District
Jeff Meith, Oakdale Irrigation District
Robert Mount, Fresno Irrigation District
Robert Mussiter
Les Nelson, Solar Energy
Nancy Rader, American Wind Energy
Wayne Rafflesberger, Coast Intelligen, Incorporated
Barbara Sujak, Pacific Gas & Electric
Cindy Sullivan, South Coast Air Quality Management District
Jan Smutny-Jones, Independent Energy Producers Association
Kathy Treleven, Pacific Gas & Electric
V. John White, CEERT

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1 from the events that have happened in the last few days,
2 particularly the merger of SoCal Gas, and San Diego Gas and
3 Electric, that in many respects we're not just talking about the
4 electric industry, but we're really talking about the energy
5 industry or at least the utility side of the energy industry
6 within California.

7 I want to make it clear that literally on the day that
8 the Assembly passed 1890 that we began to plan for implementation.
9 We realized that we're talking about the re-invention of not only
10 the industry but also of governments' response to the industry as
11 well.

12 About ten days ago all five of us conducted an offsite
13 to undertake a strategic replanning of the Energy Commission. And
14 so while we're interested in your views about how to implement the
15 provisions of the bill today, we'd also welcome your views about
16 how to reinvent this agency.

17 We are proposing today to assign the responsibilities
18 for our particular task for implementation to two new committees
19 and to several existing committees here within the Commission. We
20 contemplate that the committees will deliberate during the months
21 of November and December, and that the Commission will return to
22 En Banc hearings beginning shortly after the first of the year.

23 All five of us have distinct interests in the wide range
24 of issues that are before us, and we also want to make sure that
25 we conduct the most open public process possible.

1 We do not contemplate making decisions today. Our
2 objective is to ensure that we are considering all the issues that
3 you deem important relative to our responsibilities and also to
4 conduct some planning about how we proceed with that process to
5 ensure that there is, in fact, active and open public
6 participation. Not just here in Sacramento, but, frankly,
7 throughout the state.

8 I would ask as you make your comments today that to the
9 extent we can avoid repetition, obviously we can ensure a more
10 efficient use of our time. And, therefore, to the extent that
11 other speakers have previously made a point with which you agree,
12 if you would simply indicate that that is your perspective as
13 well, I think that all of us will be better off.

14 I'd also like to note that Susan Gefter and Josie
15 Comphele are in the back of the room. There are special forms that
16 we have prepared to provide insurance that you're added to the
17 appropriate mailing lists for each of the particular dockets that
18 are before us.

19 I'd also note that in our efforts to try to ensure that
20 we provide as much communication relative to this process as
21 possible, the Energy Commission today is reportedly the first
22 governmental agency to use the Internet to broadcast a live public
23 hearing at this hearing on electric industry restructuring.

24 We have attempted to ensure that all of the members of
25 the various working groups that have been composed under the

1 auspices of the Public Utilities Commission, as well as energy
2 media and computer editors, are aware of this opportunity.

3 I simply would suggest to you that if you believe this
4 is an important addition to our efforts to try to communicate,
5 please let us know, and we'll make every effort to include this as
6 an option in the future as well.

7 When I mentioned to you that we are proposing to make
8 several assignments relative to our existing committee structure
9 here at the Commission and to create some new committees, I'd like
10 to just briefly outline what we do contemplate considering before
11 the close of our hearing today.

12 Now the first is that we would assign to the Budget
13 Management Committee the responsibility for overseeing our
14 participation in the creation of the ISO and the WEPEX Boards,
15 and, also, I should say the Oversight Committee as well. The
16 Budget Management Committee is composed of myself and Commissioner
17 Rakow.

18 Secondly, we would propose assigning explicitly to the
19 Electricity Report Committee the responsibility for overseeing the
20 CTC exemption allocation for the irrigation districts.

21 We would also explicitly add to the responsibilities the
22 Conservation Report and Programs Committee the responsibility to
23 oversee our comments relative to the demand side management
24 programs that are under the auspices of the Public Utilities
25 Commission.

1 I should indicate, as well, first the Electricity Report
2 Committee is composed of Commission Rohy and Commissioner
3 Sharpless. The Conservation Report and Programs Committee is
4 composed of Commissioner Sharpless and Commissioner Rohy.

5 We would also propose assigning to the Research and
6 Development Committee the responsibilities for the R&D programs
7 that are also considered within the bill.

8 Then we propose the creation of two additional
9 committees. First a Renewable Program Committee composed of
10 Commissioner Moore and Commissioner Sharpless to oversee all of
11 the many issues associated with that aspect of the legislation as
12 well.

13 And finally, a Market Structure Committee, again
14 composed of Commissioner Moore and Commissioner Sharpless to
15 oversee and provide policy oversight for Staff participation and
16 technical committees involved in developing guidelines, procedures
17 and other mechanisms required to implement the competitive market
18 structure of the legislation.

19 With that, I will simply say we should move on to our
20 agenda, but first I'd like to encourage my colleagues to offer
21 their opening comments as well.

22 Commissioner Rakow.

23 **VICE CHAIR RAKOW:** Thank you, Chairman Imbrecht.

24 The Governor and the Legislature vested the Energy
25 Commission, as you know, with several critical tasks. Two of

1 which I would like to comment on at this time.

2 The Commission is given the purse strings to
3 California's renewable resource industry and the future of the
4 public interests of research, development and demonstration of
5 energy technologies. These are really, as you know, are not
6 simple exercises. And we take this responsibility, as Chairman
7 Imbrecht just mentioned, very seriously. And we have a clear
8 understanding of the gravity of what is at stake.

9 The renewable industry started with a bang with PURPA
10 almost 20 years ago. The industry, except for those truly
11 competitive resources, is now literally on the cliff. The
12 renewable constituency, the Legislature and the Governor have
13 deemed the importance of the industry to California's economy
14 environment in the future.

15 So all of us here today are responsible for shaping that
16 future. And this is not an easy task, but as one Commissioner I
17 believe that our goal should be to shape a plan that will not only
18 sustain but to build a bridge into the market and enable
19 renewables to compete. We should not be in a position of just
20 passing out the dollars in that plan.

21 Without getting into a lot of substance, let us examine
22 the facts of the existing renewables. We have today about 600
23 renewable projects with an installed capacity of just over 5700
24 megawatts producing almost 29,000 gigawatt hours per year. In
25 1994, renewables accounted for 10 percent of the installed

1 capacity and 11 percent of the state's energy.

2 Without question, this is a very solid contribution from
3 existing renewables. Yet the question that faces us is: Who's
4 going to survive, and who will be departing?

5 To place that funding that we have from the Legislature
6 into perspective, the 29,000 gigawatt hours of annual energy over
7 four years, you divide this by the maximum 60 percent of the total
8 \$540 million, results in 2.8 mills or 28 hundredths of a cent per
9 kilowatt hour.

10 As a comparison the current price of non-firm energy is
11 15 mills per kilowatt, and the price for as available energy under
12 the standard offer contracts is about 20 mills per kilowatt. And
13 considerable higher for capacity and energy. So the life ring for
14 existing renewables does not offer much floatation in any stormy
15 sea ahead.

16 Research, development, demonstration and market
17 transformation brings us into another area. A few of the naughty
18 matters that are going to confront us are the funding levels
19 between T&D and non T&D research and development. The categories
20 of R&D activities, the eligibility criteria, maximizing and
21 coordinating the efforts of all utilities, both investor-owned and
22 publicly-owned, in order to get the best product for each dollar
23 spent, we must also look at coordination with renewables to avoid
24 double spending.

25 So we're very indebted for the excellent work that has

1 been done already by the working groups. Many of you are here
2 today who have been associated with these working group reports,
3 and we hope that you will continue to be working with us as we try
4 to resolve these problems and come up with some really viable
5 plans.

6 Thank you.

7 **CHAIRMAN IMBRECHT:** Thank you.

8 Commissioner Sharpless.

9 **COMMISSIONER SHARPLESS:** Yes. Well, as you've
10 remarked, Chairman Imbrecht, this is a long agenda, and I am
11 looking forward to hearing from the stakeholders both in terms of
12 the issues that they would like us to consider and also process
13 questions that they will hear from the Staff. So I'm not going to
14 belabor long comments.

15 I would just say that I am pleased that the Legislature
16 has shown their confidence in the Energy Commission to assign
17 these important topics to this agency.

18 As Vice Chair Rakow has indicated, I think we're at a
19 critical juncture here, and as people often remark, in challenges
20 come opportunities. I view this as an opportunity.

21 The Energy Commission has looked at renewables and
22 research and development as areas that further the goals and
23 objectives of California's energy policy, and I think that we have
24 an opportunity here to now look at what's going on in the
25 competitive market and design a system where we can continue to

1 pursue these worthwhile goals.

2 So I'd like to leave my comments short and pass it on to
3 my next colleague.

4 **CHAIRMAN IMBRECHT:** Commissioner Rohy.

5 **COMMISSIONER ROHY:** Thank you, Chairman Imbrecht.

6 I'd like to echo my fellow Commissioners, welcome to the
7 En Banc today and to add a few thoughts.

8 That we have a lot of material to cover here today, as
9 we've said, and we've got a lot of work to do over the next few
10 months. As many of you see when you look out your rearview mirror
11 on your car, it says the objects in this mirror may be closer than
12 you see. I would say the days on the calendar are closer than we
13 think. So as we look forward, there is a lot to do.

14 And as Chairman Imbrecht said, it's how we do things,
15 it's very important. We need to work as we usually do in our open
16 public process but expand it as we see here from this fine
17 participation today. The results of our activities, for instance
18 in renewables and R&D, will affect Californians and that industry,
19 but also others, the ratepayers, and we must make sure that those
20 people all have an active voice in what we're doing in the next
21 few months.

22 I'd like to remind ourselves, all of us, that we are
23 here to implement what the Governor and the Legislature has set
24 into law which is a very important task. It's challenging to
25 implement well, and we have a short time to do it.

1 Let's see. I want to not repeat a lot of comments that
2 have already been said here. But we don't have the luxury of
3 striving for absolutely perfect solutions, but we want to
4 accommodate all the parties and their input here. And we want
5 simple and practical solutions. Because the world is changing,
6 the marketplace is changing, as Commissioner Imbrecht said in his
7 opening remarks, with the changing in the utilities here in
8 California. We will be not on a stable platform of assumptions,
9 but the world around us will be changing as we go forward.

10 So keeping our solutions simple and direct is one of the
11 key ways I'd like to do business. I'm prepared to work hard with
12 the rest of my fellow Commissioners, and as whatever the
13 assignments turn out at the end of the day, to cooperate fully
14 with all of those here on the dais with me and with you in the
15 audience. So I will pass it on now.

16 **CHAIRMAN IMBRECHT:** Okay, thank you. Commissioner
17 Moore.

18 **COMMISSIONER MOORE:** Yes, very briefly, Mr. Chairman, I
19 agree with the remarks that you made earlier to open this and
20 would suggest that it's easiest to see this in the context of a
21 changing Commission or a Commission that's attempting to adapt to
22 a rapidly changing energy world, and the hearings that we'll hold
23 should be seen in that context. They should be seen as a flexible
24 field event where we're trying to hold as many hearings as
25 possible, trying to gather as much information and make a report

1 back to our colleagues for action in the shortest amount of time
2 possible.

3 But I think that means for all the Staff who are
4 listening that we're going to demand extraordinary and perhaps
5 unique assignments from the Staff as well. We may have to cross
6 divisions in order to get the talent that we need on an
7 incident-by-incident or a hearing-by-hearing basis. So we'll be
8 looking to the Staff. We'll be looking to the stakeholder
9 community as well for a lot of cooperation in order to accommodate
10 our needs in the time frame that's involved and accomplish our
11 tasks.

12 I look forward to it, and I think it's going to be very
13 exciting and very challenging time.

14 **CHAIRMAN IMBRECHT:** Thank you very much.

15 Our process today is going to be that with respect to
16 each topic we're going to ask our Staff to outline in a fairly
17 succinct fashion the issues they believe to be the most critical
18 for our consideration. We will then turn to public comments and
19 invite you to add, subtract or expound upon the points which they
20 have made.

21 And so let me begin by introducing Mr. Steve Rhoads, our
22 Executive Director, who will assign or describe the Staff
23 assignments.

24 **MR. RHOADS:** Thank you very much, Mr. Chairman.

25 We, as Staff, recognize the importance of AB 1890 by

1 Assembly Brulte. We regard it definitely as the most important
2 piece of legislation this decade. And in particular our highest
3 priority will be to focus on the three areas in the bill that we
4 are directly responsible for. The areas of the renewables, the
5 RD&D and the irrigation districts. And we have tried to focus and
6 reorganize our Staff for that particular purpose.

7 For each area we have assembled a team of analysts and
8 led by a project manager. For renewables, the project will be
9 managed out of the Development Division, and Nancy Deller is the
10 Division Chief. And Marwan Masri is the Project Manager.

11 And would the two of you please stand?

12 For the irrigation districts. the project will be
13 managed out of our Forecasting Division, which is Dan Nix is the
14 Project Manager. I mean is the Division Chief. And Linda Kelly
15 is the Project Manager. I don't know if they are in the audience
16 right now. They are probably waiting in the wings, but you will
17 meet them very very shortly.

18 And also for the RD&D, that is also being managed out of
19 our Development Division with Nancy Deller and Ron Kukulka is the
20 Project Manager. Is Ron here? He is not. And Mike DeAngelis.
21 Mike DeAngelis, would you?

22 I want to say one other thing on the Internet. As the
23 Chairman mentioned, this is the first real audio that we know of
24 for a government agency. The other thing that's unique about this
25 is that this is being recorded. And by this evening we will also

1 have it up on the Internet so that people will be able to play it
2 back. Okay. Fast forward it. And you might bear that in mind
3 when you are speaking.

4 **CHAIRMAN IMBRECHT:** I wish we could do that.

5 [Laughter]

6 **MR. RHOADS:** And the only thing that we also ask is
7 that you speak fairly close to the microphone so it will pick it
8 up better. But it's a very unique day for many many reasons, and
9 we are looking forward to it.

10 With that, I'd like to turn it over to Nancy Deller.

11 **MS. DELLER:** Well, with my voice today, I don't know
12 that I'm a good person to be on tape.

13 I was going to show a slide, but it's obvious that that
14 won't be possible I think with this room. But I would like to
15 just briefly go over what we have to do according to AB 1890 with
16 regard to renewables. What's required in the report that we have
17 to submit. And then turn it over to Marwan to go through some
18 background information on renewables to put the activity in
19 perspective. And a lot of that will deal with what I think
20 Commissioner Rakow was mentioning earlier. And then to also go
21 through the issues that are in the appendix.

22 As Commissioner Rakow mentioned, AB 1890 provides at
23 least \$540 million for in-state operation and development of
24 existing new and emerging renewable resource technologies. The
25 bill also requires that the Energy Commission submit a report by

1 March 31, 1997, which, as Commissioner Rohy was mentioning, is not
2 that far away. And this report is to have recommendations for
3 market based mechanisms to allocate the funds, the 540 million.

4 These market base mechanisms, according to AB 1890, as
5 laid out in the bill would, should, reward the most cost effective
6 renewables, should implement a certification process for renewable
7 providers, should allocate funds between existing, on the one
8 hand, and new and emerging renewables on the other hand with a
9 floor of no less than 40 percent for either category. So there
10 would be no less than 40 percent. So a category could go up to 60
11 percent, but nothing would be funded at less than 40 percent.

12 The report, the market mechanisms in the report, should
13 also allow customers to receive a CTC rebate from the fund or
14 reduction in electricity bills, should allow voluntary
15 contributions from customers, should allow a direct access
16 incentive and should utilize financing and other mechanisms to
17 maximize the effectiveness of the funds.

18 That's quite a challenge. But in addition, the report
19 is also to consider, take into consideration, the need for
20 mechanisms to ensure that cogeneration facilities that utilize
21 energy from environmental pollution in its process, or micro cogen
22 facilities of less than one megawatt, remain competitive in the
23 electric services market.

24 We're also supposed to look at whether fuel cells should
25 be treated as fuel switching for the purposes of application of

1 the CTC, the competitive transition charge. And we're also
2 supposed to consider the non-energy benefits of biomass based on a
3 report that CAL EPA will be doing in consultation with us. That's
4 also due the end of March 1997.

5 And we're also supposed to take into consideration the
6 municipal utilities surcharge funds that will be used for
7 renewable resources.

8 So this is obviously quite a challenging report with
9 lots of different issues in it.

10 And with that, I'd like to turn it over to Marwan.

11 **MR. MASRI:** Thank you, Nancy.

12 I also had a few slides I intended to show and won't be
13 able to show them. There were two sets. One is the background
14 information was covered to a large extent by Commissioner Rakow's
15 introduction.

16 I would like to add to that, however, just to set the
17 context. We know we have a lot of renewables in California
18 installed on the ground today. We had a few years back, Staff has
19 done a survey about what the potential, technical potential, for
20 renewable resources in the state is. And we found out that it's
21 huge. There is about 73,000 megawatts of resource potential out
22 there in California that could technically be developed or it is
23 technically feasible to develop.

24 What we have in the ground today, as much as it is,
25 other than anywhere in the world, is only six percent of the total

1 potential of renewables in the state. So there's quite a bit left
2 remaining potential here that California can have all of it or
3 none or it or some of it. It all depends on the formulation of an
4 implementation of proper policies.

5 I would like to also add to the point that Commissioner
6 Rakow brought out which is if we were to take the whole amount of
7 money that's available in 1890, and take 60 percent of that, which
8 is the maximum that can be allocated to existing technologies, we
9 get about three mills a kilowatt hour.

10 So the message here is this is what the economists call
11 the problem of scarcity. And the problem of scarcity in general
12 is that there are not enough resources to satisfy all the needs
13 that are placed upon them. And this is an example here where if
14 we're to equally allocate the money, which of course is
15 economically inefficient, it will not help anybody. And,
16 therefore, this forces decisions and choices to be made how to
17 best utilize this opportunity in order to create a sustained, a
18 self-sustaining market for renewables.

19 Much of the rest of the facts, as I said, was covered by
20 Commissioner Rakow so I'll go now into discussing some of the
21 major issues that appeared in the hearing notice. And I'll start
22 with definitions.

23 The bill talks about the purposes of the funds for
24 renewables is to support new and emerging technologies; as far as
25 existing technologies, and so clearly there are some definitional

1 problems here of what is existing as of what date, for example.

2 The bill talks about the Commission defining what's an
3 emerging technology and includes photovoltaics as part of that.
4 But clearly there has to be a formal definition established of
5 what is a new technology and what's emerging and what's existing,
6 among other things.

7 The criteria for allocation of funds, of course, is
8 going to be one of the major issues to be dealt with here. And
9 the range can go all the way from a simple allocation,
10 mechanically moving the money out, or to use this as a strategic
11 opportunity to create something that really is long lasting and
12 helps the industry to become competitive with little or no public
13 assistance between now and the transition period of four or five
14 years.

15 There are many types of market mechanisms. The
16 allocation's supposed to be done based on market mechanism. And
17 the bill talks about two examples of those, marketing agent and a
18 clearing house. The issue here is what are the available
19 mechanisms that can be utilized and which of those can be most
20 effective in using the money, in allocating the money.

21 The next issue is the CTC rebates to customers from the
22 renewable funds. This is an issue because it goes into allocating
23 the money between the consumers and the producers really. Because
24 there is an allowance in the bill for customers who purchase
25 renewables to receive a rebate from the renewables fund to offset

1 basically their reduction in the CTC that the utility has to
2 collect as a result of that.

3 The issue here is where does the line get drawn between
4 how much of the fund goes to customers, via CTC rebate, how much
5 goes to producers, and the various schemes that are possible there
6 will have very different outcomes to how developed the market is
7 going to be for renewables. Whether we'll focus on the customer
8 or on the supplier.

9 Next issue is the time profile of fund allocation. The
10 funds are to be collected over a period of about four years, but
11 the bill is silent on over what period of time would that money be
12 allocated.

13 Now there's a difference here between existing and new.
14 Obviously, new is not here now, and new needs a period of time in
15 the future in order for, it needs a gestation period, a lead time,
16 and so on. So the question here is how far in time can we go in
17 allocating these funds in particular for a new and emerging
18 technologies.

19 Other parts of the bill have some provisions that, in my
20 mind, impact how we do this renewables report and then funds the
21 allocation funds. One of those is the granting of direct access
22 preference to customers who purchase more than half or one-half or
23 more of their load for renewable providers as satisfied by the
24 Commission here.

25 The question here is how much of an incentive is that

1 likely to be for customers to purchase renewables, and how much is
2 that likely to result in developing or supporting renewable
3 industry out there. Because that's another form of support that
4 we need to take account of when we're deciding how the money is to
5 be allocated.

6 Another source of funding that is very vague, and really
7 the amount's not specified at all, is that the municipal utilities
8 are supposed to also collect or impose a surcharge for all public
9 purpose programs. That is renewables, R&D, energy efficiency and
10 low income, but the bill does not specify what portion of that
11 money is to go to what, which of these four things. And so that
12 makes it again uncertain how much money is going to be raised
13 through that avenue to renewables and how that money is going to
14 be utilized as well.

15 The third source that is not directly allocated is
16 voluntary contributions where the bill provides for customers to
17 give, voluntarily, money to support renewables on a fixed or
18 variable basis. The issue here again is how much money and how
19 it's going to be used, and the difference here is that this money
20 collected through voluntary contributions is going to a separate
21 fund than the money that is allocated for renewables. And I
22 believe the bill says to a fund to be specified by the CPUC.

23 So the question here again is how much money would be in
24 that fund. How is it going to be used, and how do we coordinate
25 that with the fund that is administered here and eliminate

1 overlaps and double accounting and so on.

2 This is a brief description of some of the major issues
3 that we have put out.

4 **CHAIRMAN IMBRECHT:** Thank you, Marwan. That was
5 excellent.

6 I think one of the other issues clearly is to what
7 extent are we capable of integrating the emerging technology piece
8 of renewable accounts with the R&D account to ensure that they're
9 coordinated and used most effectively.

10 Just a couple more housekeeping announcements, and then
11 we'll turn to public testimony. There is a box by the door to the
12 hearing room for the mailing notices. I'd also like to just make
13 it clear that --.

14 And let me back up by saying I'd like to introduce David
15 Gamson who is Commissioner Neeper's advisor at the Public
16 Utilities Commission. His presence is welcome today. It's a
17 reflection of the fact that there has been a substantial effort to
18 try to coordinate the activities of both commissions. And I
19 should say as well other agencies of state government.

20 The need for early implementation in terms of the
21 creation of the ISO and WEPEX, the appointment of David Freeman as
22 the trustee yesterday, the requirement for cooperation with the
23 Department of Personnel Administration, our efforts to try to
24 streamline state contracting processes through General Services,
25 the need, undoubtedly, for emergency regulations to be approved by

1 the Office of Administrative Law, and certainly as well adequate
2 support from the Department of Finance for all of these
3 activities, has been overseen by the Governor's Office.

4 I've been around the state government for a long time.
5 I cannot recall a time when there's been a greater effort to try
6 to coordinate activities from a variety of state agencies with a
7 recognition that fourteen-and-a-half months from now we have to
8 have an enormous structure in place, and that we're going to have
9 to deal with all of these many issues.

10 With that, let me begin by first introducing Mr. Drake
11 Johnson from SoCal Edison.

12 **MR. JOHNSON:** Good morning, Commissioners and
13 colleagues. I will be quite brief.

14 I think that the comments that Commissioner Rakow
15 focused on, a number of issues, clearly some of them have emerged
16 almost recently in the last few days, but rather than trying to
17 debate all these issues, which is not the purpose of this, let it
18 suffice to say that I think that in terms of the renewable issues
19 that are out there on the table that were identified as part of
20 the notice are a good starting point for things that need to be
21 resolved and included in the report back to the Legislature.

22 Edison will continue to participate in the collaborative
23 effort that has taken place over the last two years or so in this
24 area, and we look forward to getting started as soon as possible.

25 Thank you.

1 **CHAIRMAN IMBRECHT:** We're off to a good start. That
2 was nice and succinct.

3 Next, Mr. V. John White.

4 **MR. WHITE:** Mr. Chairman, members, thank you. I don't
5 know if I'll be as brief. I have the advantage or disadvantage of
6 having been an active participant in the legislative process that
7 led to where we are today.

8 To some extent the task that we attempted to accomplish
9 through the legislative process with respect to preserving and
10 increasing renewables in a restructured environment is incomplete,
11 which is why we're here. Some of that incompleteness reflected
12 the difficulty of dividing the funds and so forth, but I think
13 it's also a testimony to the fact that we're truly in transition
14 from the old system to the new.

15 And I think your task and all of ours is to, I think, as
16 Commissioner Rakow said, build a bridge to the market and hope
17 that as much of what we have built can be sustained as possible.
18 But I think more importantly that we can go forward.

19 I have a couple of observations about structure and
20 about the Commission's role. I think, as you all know, the
21 evolution of the allocation authority was something that actually
22 played out quite late in the legislative process. As late as two
23 weeks before the end there was talk of these funds all going to
24 other places. There was talk about the RD&D stand at the PUC, and
25 there was talk about the renewables going to the Energy Finance

1 Authority.

2 I think one of the concerns that all the stakeholders
3 had at that time about this Commission's role and that some still
4 have is the perception of high transaction costs and high
5 administrative expense of participation and of allocating these
6 funds through this agency's processings.

7 We have a history of robust and thorough hearings at the
8 Energy Commission. Many of you have done siting cases. I'm sure
9 all of you have except perhaps the newest Commissioners. We have,
10 some of us, done several cycles of electricity reports. And I
11 think it's important that for renewables, as was described
12 earlier, this is sort of the life blood. This allocation of funds
13 and also the policy that I think you as a Commission can help us
14 develop is very vital.

15 One of the things this Commission has sought to do, I
16 think, in the course of the restructuring is to keep in mind for
17 the market enthusiasts the need for oversight, the need for
18 monitoring, the need for outcomes to be assessed against promises
19 and commitments. And I think that's an ongoing function. I don't
20 think we have come so far in the new market that we can do without
21 government oversight and policy oversight.

22 If 1890 has a weakness, it is that it lacks in these
23 respects. And to some extent the funding that we have now to
24 administer is a function of that. Basically it's all we have, is
25 the money, and the beginnings of a policy. And I think how you

1 choose to, and we all interact to produce a result, is going to be
2 the next step in building a policy.

3 And I think one of the things we got to keep in mind is
4 that the market is going to pose on all of the participants an
5 extraordinary discipline. Efficiency, cost, is going to matter a
6 great deal. And you all need to be part of that efficiency and
7 cost conscious process.

8 And I think that one of the things as we look at
9 different mechanisms we have to examine the relative virtues, not
10 just of the relative, the claims, but of how we're going to get
11 there.

12 In the case of RD&D we have existing contract management
13 functions at the University of California and with EPRI that are
14 substantial. I don't know that we need to recreate one here. On
15 the other hand, we have to have political accountability for the
16 allocation of those funds. It is not just an administrative fund.
17 It is a policy process as the Staff has noted that.

18 So I think in the case of the new renewables, I think
19 one of the things that Staff mentioned was the sort of focusing on
20 the customer versus focusing on the supplier. And, you know, the
21 organization that I'm most identified with is, on this debate, is
22 the Center for Energy Efficiency Renewable Technologies which
23 includes environmental groups and end suppliers both.

24 We like to think that we're trying to watch out for the
25 new customer and the supplier, to that customer who wants to buy

1 renewables. We believe that the new market has left very little
2 in the way of opportunity for traditional renewable resource
3 acquisition.

4 Project financing through long-term contracts is
5 virtually not an option. We're talking balance sheet financing
6 and a customer based purchase decisions. The utilities and the
7 other market participants greatly resisted the notion of mandates
8 on the purchases.

9 I happen to think that a mandate on the purchase is not
10 an unreasonable thing, but there are no mandates on the new market
11 with respect to minimum levels of purchase of renewables. So we
12 have to get the customer to want to buy them. And I actually
13 think that's not as hard as one might think, although I think
14 there's barriers along the way. And I hope this Commission will
15 take an interest, as it has traditionally, in helping remove the
16 barriers to renewable technologies getting to the customer.

17 There is a great deal of market power today remaining in
18 the system. And the rules of the game with respect to the ISO,
19 with respect to access to customers, with respect to unbundling,
20 are all things as important to the renewables industry as this pot
21 of money. And I would hope that at least there would be some
22 significant consideration along with all of the project specific
23 allocations between both new and emerging project proposals and
24 existing suppliers that we not lose track of the customer.

25 You saw in the *L.A. Times* yesterday the talk about the

1 merger between San Diego and SoCal Gas. Not something we knew was
2 going to happen when we did this legislation, and perhaps new
3 things will now be remembered. As Tom Willoby and Jan
4 Smutny-Jones will recall there's a lot of sort of things that
5 happened in the restructuring that I think we're all still trying
6 to absorb. And the merger certainly now gives us an inside into
7 the position of those two parties.

8 But one of the things that was said in the *L.A. Times*
9 article was the -- this was about customers. And I think for
10 renewables customers are very very important. Because we think
11 they're there. We have some research that we will share with the
12 Commission that has just come into our possession from a poll that
13 is a fairly recent sampling of public sentiment on this.

14 We also have been working as an organization since the
15 legislation to try to sort out what the customer incentive and
16 certification issues might be, and we hope to be able to provide
17 at the workshop on the 25th, which I believe is still scheduled.
18 Do we have a workshop?

19 **MR. MASRI:** I don't believe that's a firm date.

20 **MS. WHITE:** Whenever the first workshop is. We have
21 been doing some thinking about the certification process and about
22 the verification process, about the licensing. We think again we
23 need to have something in place that works. And it's particularly
24 important and timely with respect to certifying who an eligible
25 certified renewable provider for purposes of the direct access

1 phase-in opportunity.

2 We had a meeting last week at the PUC. This issue came
3 up of what does the renewable direct access provision 1890 mean
4 for the phase-in schedule. It's our position that the plain
5 meaning of the statute is that irrespective of any phase-in, there
6 shall be 50 percent renewable customers able to get access. So
7 your certification process is all that is required for that to
8 occur.

9 So one of the things I hope as we figure out how this is
10 going to go forward is that we maybe structurally try to keep the
11 customer related issues, both the CTC, or let's not call it that,
12 let's call it the customer incentive strategy for fund allocation,
13 needs to be looked at together with the certification issues
14 together with the direct access provisions.

15 And I think we can construct perhaps a strategy that
16 will allow us in the next four years to construct the
17 underpinnings of a new market that will sustain and perhaps even
18 grow the renewables energy.

19 If you look at the data that we have about what the
20 public preference is, and, you know, obviously access and the
21 amount of the premium is going to be a significant issue, but the
22 data is there to suggest the people want to participate in this
23 market.

24 So I would hope that we can look at those issues sort of
25 together. I think for now the allocation issues between existing

1 and new and emerging are best left for a later time. And perhaps
2 we can even look at customer based incentives as a way to assist
3 existing projects.

4 The other issue I would like to comment on that we had
5 something to do with was the exemption for fuel cells from CTC.
6 This has not been highlighted a great deal, but I would point out
7 that really all that is required for the CTC exemption to go
8 forward for the fuel cells is for there not to be a contrary
9 finding by this Commission that such an exemption is not
10 appropriate.

11 I think that you will also need to look at the micro
12 cogen and environmentally benign proposals for CTC exemption, but
13 there is a presumption that fuel cells should be exempt in the
14 statute, and we would hope that the Commission would work with the
15 industry and others to make that go forward.

16 We think that fuel cells and other distributable
17 renewables, this is the treatment that was also afforded to DSM
18 investments of all kinds and for residential photovoltaics are
19 exempt from CTC, any reductions in demand are exempt from CTC.
20 This is not so much an incentive for these technologies as a
21 prevention of disincentive, because these technologies are still
22 going to be premiums above the market cost, but not having the CTC
23 exemption will make them less than competitive and may be very
24 significant during the transition.

25 So those are my principal comments and hope that we can

1 work closely with you and with the Staff and try to facilitate on
2 some issues where we think there is agreement.

3 There was a great deal more work done on renewables
4 policy and particularly certification issues in the legislative
5 negotiations. IEP, Steven Kelly and Jan Smutny-Jones played a
6 very important role as the scribe of the different versions, and
7 there was a lot of good work done, and we're trying to continue to
8 work with them and the other market participants and hope that you
9 can through your participation at the PUC and in this development
10 of ISO help watch out for the interests of renewables with respect
11 to access to the market, with respect to opportunities for them to
12 be economic in their own right.

13 So thank you.

14 **CHAIRMAN IMBRECHT:** Thank you, John.

15 Before I offer any comments, is there a Lloyd Sharp in
16 the audience? Sir, you have an urgent phone call.

17 My personal response would simply be, and I appreciate
18 your comments, is that in terms of process we are talking about
19 trying to reinvent government. And some of that flies in the face
20 of traditional issues associated with competitive bidding,
21 etcetera, and so I would urge you all again to work with us to try
22 to find ways to streamline the process and to do it in a fashion
23 that's going to enjoy legislative support as well.

24 I'm not sure what this reflects generally, but I have
25 four representatives from Pacific Gas and Electric.

1 [Laughter]

2 **AUDIENCE:** Market power.

3 **CHAIRMAN IMBRECHT:** That all apparently wish to address
4 the same.

5 [Laughter]

6 **CHAIRMAN IMBRECHT:** I'm not sure who to introduce
7 first. Kathleen Treleven, John Guardalabene, Barbara Sujak, I
8 believe, and Betsy Krieg.

9 **MS. KRIEG:** I won't be speaking.

10 **CHAIRMAN IMBRECHT:** Okay.

11 **MS. TRELEVEN:** Chairman, if it's okay, I'll go ahead.
12 I'm Kathy Treleven, and John is our lawyer; but I'm been the PG&E
13 representative on the Renewables Working Group --

14 **CHAIRMAN IMBRECHT:** Thank you.

15 **MS. TRELEVEN:** So I'd like to speak on that particular
16 issue.

17 First of all, I'd like to say that I'm with Marwan in
18 terms of the great complexity of these issues, and PG&E is looking
19 forward to working with you and with the other parties in these
20 proceedings and as you develop your report to deal with these very
21 difficult allocation mechanisms as well as addressing other
22 renewable issues.

23 We see this as a transitional pot of money that should
24 go to supporting existing renewables, developing new renewables,
25 and, ideally, structuring something that can be crafted to

1 contribute to the ultimate viability of renewables in the
2 competitive generation market and in the sort of post 2001 world.

3 We look forward to working with the process. We find
4 the long list of issues, the right ones, a real challenging task,
5 but we'll be there on the 25th and all the En Banc and committee
6 meetings beyond.

7 Thank you.

8 **CHAIRMAN IMBRECHT:** All right. Thank you very much.

9 Questions from any of my colleagues? And any of your
10 other representatives wish to speak at this point?

11 **MR. GUARDALABENE:** Commissioner, we have
12 representatives for each of the three subjects, so as they come up
13 the appropriate person will address the issue.

14 **CHAIRMAN IMBRECHT:** I see. Very good. Thank you.

15 Trying to keep my cards here organized. Next Mr. Joe
16 Iannucci, if I'm doing justice.

17 **MR. IANNUCCI:** Thank you, Mr. Chairman. Just some very
18 brief thoughts on --

19 **THE REPORTER:** Could you spell your last name?

20 **MR. IANNUCCI:** Sure. Joe Iannucci, I-a-n-n-u-c-c-i,
21 and I'm Principal of Distributed Utility Associates.

22 Thank you again. Very very brief thoughts on allocation
23 of funding research funds that the CEC will be involved in. As I
24 understand it there are funds that will be used for renewables,
25 there will be funds that will be used for common good R&D, and

1 then there are funds that will be left at the utilities for
2 general use. I would assume some of that for transmission and
3 distribution research. All I would ask is that someone think
4 about the places where those interface with one another.

5 We've had some very exciting meetings in the last few
6 months. Some sponsored by the Energy Commission on distributed
7 energy resources. We had one yesterday that was very well
8 attended here. And distributed resources sit right at the
9 interface between renewables, transmission and distribution, and
10 common good R&D.

11 So I know it will be a very difficult chore, and I don't
12 mean to make it any more difficult than it has to be, but if
13 distributed energy resources are going to make it in California
14 and in the rest of the world, someone's going to have to think
15 about how to make sure that they get their full due.

16 Thank you very much.

17 **CHAIRMAN IMBRECHT:** Okay. Thank you. We'll add that
18 to the list.

19 Mr. Bob Judd.

20 **MR. JUDD:** Mr. Chairman and members, my name is Bob
21 Judd. I represent the California Biomass Energy Alliance which,
22 as you know, is comprised of 36 power plants in California
23 providing about 800 megawatts of baseload electricity in the
24 state.

25 While the biomass industry is different than other

1 renewable facilities, it is also very much the same except on the
2 issue of fuel cost. The biomass industry differs because we are a
3 solid fuel technology that requires a collection processing and
4 transporting of our fuel unlike any of the other renewables. And
5 we use about eight million tons of wood waste in California a year
6 as fuel.

7 We are quite pleased that this proceeding is taking
8 place at the Energy Commission, recognizing the fact that no other
9 state agency has done as much for as long for the renewables
10 industry as the California Energy Commission.

11 We would offer a very few brief suggestions to you in
12 these proceedings. One objective, perhaps redundant with Mr.
13 Imbrecht's comments, we encourage you to seek to maximize the
14 contributions to the funds available for support of existing and
15 new renewables. That would argue for making recommendations for
16 very effective voluntary contributions fund as discussed more
17 generally in the legislation.

18 We would also encourage recommendations that would
19 minimize leakage from this fund. In other words, if there is a
20 scarcity of dollars, let us at least assure ourselves of the
21 maximum dollars available within the context of the legislation.

22 The issues before us are obviously macro and micro
23 issues. What future do we want. What's more important than the
24 next issue. When we get into definitions, we're obviously in the
25 range of clarification. As we define, we also then set guidance

1 for how to allocate the 20 percent that is at float right now. To
2 us, issues such as rollover CTC credits and others will deserve
3 serious discussion.

4 We consequently then recommend thoughtful development of
5 the criteria for allocation. We think it's central to the task
6 here. That would include questions such as: Are all renewables
7 the same. Is it only cost that differentiates existing and new
8 renewables. How should you value the externalities of different
9 renewables. Do project, renewable projects, that are already at
10 or below the theoretical market clearing price deserve financial
11 support from this fund.

12 Those questions, I believe, will be addressed in the
13 process of the working groups.

14 We would encourage you to give particular weight to the
15 industry voice during the allocation of these resources. The
16 generators rightfully should be looked to for recommendations. We
17 hope to be able to provide you with consensus recommendation from
18 the renewable resource generators, and we hope that the voice of
19 the industry most affected is given a priority in your hearings.

20 All of us have experienced working together among the
21 renewable generators. We have worked together for 18 months or
22 longer. We have excellent working relationships and have
23 demonstrated and will demonstrate to you a willingness to
24 collaborate on solutions in this mix.

25 Finally, I would encourage, given the shortness of time

1 and to the extent possible, simpler solutions are better. As your
2 recommendations go back to the Legislature, our experience in the
3 past session dealing with the Legislature is that it is easier for
4 members to understand coherent synergistic simple solutions rather
5 than complicated solutions, including some that we proposed
6 ourselves that didn't make it through the process.

7 To the Members of the Commission and to other
8 participants we offer our full support to your effort, our
9 cooperation, our participation to the extent that you need it, and
10 we look forward to the next step in the process.

11 **CHAIRMAN IMBRECHT:** Thank you very much.

12 I think it's important to underscore the fact that there
13 is also going to be a substantial turnover in the Legislature no
14 matter who prevails come election day. And that is going to mean
15 that it's incumbent upon us to provide an adequate amount of time
16 for education and explanation about what we're proposing.

17 I should have said earlier that it is our objective to
18 try to reasonably close in these issues somewhere between the
19 middle of February and the first of March. With recognition that
20 even though the deadline is not until March 31, we're going to
21 need some time with all of your help to try to educate and
22 persuade.

23 So I thank you for your comments.

24 Next, Mr. Jan Smutny-Jones.

25 **MR. SMUTNY-JONES:** Thank you, Chairman Imbrecht.

1 I'm Jan Smutny-Jones. I'm the Executive Director of the
2 Independent Energy Producers Association. And since about 1982
3 IEP has had the pleasure of representing a broad variety of
4 renewables and other technologies here in California which has
5 always made our task somewhat interesting in terms of trying to
6 serve the needs of a very diverse industry.

7 We represent virtually every type of renewable out there
8 which has made this issue in 1890 a fairly interesting one for us
9 in terms of trying to sort out the differences of need between the
10 different renewable resources, and we gladly hand that task off to
11 you.

12 I would just like to point out that California has for
13 many years has had very good renewable energy policy and diversity
14 policy. I've spent many hours in this room with many of the
15 Commissioners here, and I see Commissioner Mussiter in the back
16 row. We have quantified every molecule of NOx in the state, of
17 CO2, we have accounted for diversity, we've had competitive
18 auctions; and as a result of all that activity, not one new
19 renewable resource has been built in this state in the last ten
20 years. Which leads us to the conclusion that policy alone won't
21 get us there.

22 We happen to believe that the market that is coming out
23 of 1890 and the work at the PUC is critical. Because we do
24 believe, as Mr. White indicated from CEERT, that there is a very
25 clear preference among customers for clean and renewable

1 resources. And so the question is is how to get to those
2 customers.

3 Just a couple of quick points. There are two, I think,
4 major tasks before this Commission. One, which I think the other
5 parties have referred to earlier today, which is one of allocation
6 of dollars for existing resources. As Mr. Masri pointed out this
7 is a resource constrained problem which basically makes it
8 imperative that the Commission maximize the ability to leverage
9 those funds as much as possible.

10 And I think to ensure that not only are the funds
11 allocated fairly, but to ensure that the funds are allocated in
12 such a way that the facilities receiving those funds actually
13 survive and it provides them a meaningful transition into a
14 market structure.

15 I think you also need to be sensitive to the fact that
16 all of this is dependent upon some other issues, ongoing issues,
17 that this Commission and, in fact, most of the participants in
18 this room have no control over. For example, how short run
19 avoided costs will be determined in the future. This is the SRAC
20 issue at the PUC. Very critical to who needs what in terms of a
21 transition.

22 Ancillary services. There may be a future market for
23 ancillary services and other reliability products in the future.
24 That will have a dramatic impact on what resources actually need
25 in order to get through the transition.

1 The second area is really a market one, and this is an
2 area that the IEP plans on being very active here. We believe
3 that the customer oriented rebate has a lot of merits to it. This
4 will give ultimate customers a choice to choose what kinds of
5 power they want to purchase in the future.

6 Again, as Mr. White indicated, there is a considerable
7 amount of research that indicates that customers do want to
8 purchase clean renewable resources, and we're very bullish on
9 that. But I think we should also look to existing resources. Are
10 there other products or services that are non-energy related that
11 could be provided to help boost the viability of these projects.

12 I'm not suggesting that between now and March you need
13 to come up with a definitive list, but this is certainly an issue
14 that you need to consider.

15 Finally with respect to all of this are what are the
16 economic development opportunities for California, specifically
17 rural California. I think it's no big secret that a lot of these
18 projects are in areas of this state that have been hammered by the
19 changing economics, whether it's forestry, whether it's
20 agriculture, whether it's any other number of other sectors of our
21 economy, and these renewable projects provide a very real tax base
22 and very real jobs for people in those states. So is there
23 something else we can leverage off of with respect to economic
24 development.

25 Couple of other areas. Certification. Mr. White

1 suggested that this is an area. I personally believe that this is
2 going to be critical for this Commission to assist us, the
3 remaining of us in the private sector right now working on this
4 issue, but in the future it's going to be important that customers
5 know what they're buying. Much as you go to the market and buy
6 non-fat yogurt. You know what that means. You don't have to
7 study the label to know what it means. That kind of certification
8 in the future needs to be available for renewable resources, and
9 it needs to be non-obtrusive and fairly easy to apply.

10 Education, I think, is going to be critical. And this
11 is one area that I think has been lacking throughout this debate
12 is we are on the verge of a complete restructuring of the utility
13 industry. If you go home and talk to your neighbors about this, I
14 think you'll be profoundly surprised by the fact that very few of
15 them understand that.

16 And with respect to renewables, I think very few people
17 understand that they will actually have a choice to exercise their
18 preference for purchasing clean resources in the future.

19 So one of the issues with respect to when you report
20 back to the Legislature is what, if anything, needs to be done to
21 expand the level of an education process. Sort of a generic you
22 will have the power to choose in the future.

23 Finally, simplicity. And Mr. Judd referred to this
24 earlier. There is a roomful of policy-wonks behind me. This
25 group of people, and I'm one of them, are quite capable of taking

1 this discussion and going on for years in terms of trying to find
2 the perfect policy. There is no perfect policy. We spent all
3 summer trying to find one. We spent many awkward moments before
4 Senator Peace's committee trying to piece one together. There, we
5 were unsuccessful.

6 So I think the KISS rules here. Keep it simple stupid.
7 We're going to need to have something that is easily understood by
8 the Legislature in terms of what they actually need to do next
9 year. It has to be simple for the customers.

10 And then finally I think by way of simplicity we have to
11 be very careful that this is as non-intrusive as possible.
12 Chairman Imbrecht talked about where we were in essence trying to
13 reinvent government, and I think that's a good thing. And we need
14 to be important, the important point here is we can't just
15 reinvent the processes that we're all used to both here and at the
16 PUC, but we're going to have to rely on, I think, and look for new
17 mechanisms in the market really to push these renewable policies
18 forward.

19 I am personally very bullish on this. I think that we
20 have a real opportunity here to actually move renewables from the
21 doldrums and actually see some new megawatts built in the next
22 couple of years. And we look forward to working with you between
23 now and March on that effort.

24 Thank you.

25 **CHAIRMAN IMBRECHT:** Thank you. I think one of the

1 things that we need, and I would encourage the input of others as
2 well as you, Jan, is what do we need to take on for March 31, and
3 then looking at the remainder of the year relative to some of this
4 market development and public information issues.

5 I think everyone knows that for roughly three years we
6 have advocated a policy of maximum choice for the maximum number
7 of consumers. We have known for a long time that we're going to
8 have to step up our efforts in terms of market information. And
9 whether all of those questions need to be addressed by March 31st
10 or not, I think is an issue that I would welcome any input from
11 everyone.

12 Okay. Next Mr. Marv Lieberman, the Electric Power
13 Research Institute.

14 **MR. LIEBERMAN:** Mr. Chairman, I had signed up for the
15 RD&D.

16 **CHAIRMAN IMBRECHT:** Pardon me. Sorry, I misread.
17 We'll take you a bit later.

18 Okay, Dr. Larry Berg.

19 **DR. BERG:** Thank you, Mr. Chairman, Commissioners. And
20 I will be very brief.

21 I'm speaking today as a Member of the Board of Directors
22 of Ballard Power Systems, which is a proton exchange member and
23 fuel cell company headquartered in British Columbia, but I'm
24 pleased to say that just recently opened a new facility in San
25 Diego, California, for our subsidiary Ballard Power Corporation,

1 which I'm also speaking on behalf.

2 My comments are very brief. One, to reiterate what Mr.
3 White had said earlier, and that is the critical role of the
4 Commission with regard to the exemption of fuel cells from the
5 CTC. We look forward to having the opportunity to work with you
6 and presenting what we think will be strong evidence as to why
7 that should be done.

8 The second point I'll reserve for the RD&D, and that is
9 that the expenditure of funds in these and other areas we hope
10 will be emphasized on those projects will bring about the most
11 rapid commercialization of a product. Vis-a-vis as long term
12 impact, not only on providing energy, but also on economic
13 development in the State of California.

14 And we at Ballard and our other colleagues in the fuel
15 cell industry, which is, frankly, quite rapidly growing in the
16 State of California, look forward to working with you in the
17 development of this new energy system which we think will be of
18 extreme importance in the 21st Century.

19 Also I would comment that the decision by the
20 Legislature to rest or vest the fuel cell exemption discretion in
21 the Energy Commission we commend. I'm familiar with the long
22 record certainly with the Chair and the other members whom I've
23 known in promoting and, not necessarily promoting, but in
24 encouraging in a variety of ways the development of what is the
25 largest renewable and cleanest energy in the country, if not in

1 the world, and so we are very pleased and look forward to working
2 with you in promoting this new technology. And I thank you for
3 the time.

4 **CHAIRMAN IMBRECHT:** Thank you. I should hasten to add
5 if any of my colleagues have questions, please let me know.

6 Mr. Wayne Raffesberger.

7 **MR. RAFFESBERGER:** Good morning, or I think it's good
8 morning, Chairman Imbrecht and Members of the Commission. My name
9 is Wayne Raffesberger, and I am a co-owner of a family business in
10 San Diego. Actually San Diego County in San Marcos. We
11 manufacture micro cogenerators.

12 **THE REPORTER:** Excuse me, sir, could you also spell
13 your last name?

14 **MR. RAFFESBERGER:** Sure. R-a-f-f-e-s-b-e-r-g-e-r.
15 Easy.

16 We are so micro that our product is only 60 kilowatts.
17 So they're not large. I did turn in remarks, and I hope that you
18 Commissioners have them. It's a three-page letter and a picture
19 of our product on the back if you're interested.

20 We are in front of you today, as I think you know,
21 because we appeared in front of Senator Peace's committee. We
22 found out very late about the impact of the legislation. The
23 potential harm of CTCs on our product and on the industry. That's
24 because we were not at the table. We were not part of the groups
25 that met for so long, and that might be our fault; but frankly

1 we're so small and the industry is so tiny in this state any more
2 that we don't have lobbyists or anyone looking out for us up here,
3 and that's probably our fault again.

4 But once we did find out, and I did end up in up here
5 testifying. I testified, I think, six times in a two-week period
6 to Senator Peace's committee.

7 The result of all of that was for us to be attached with
8 the renewables. We understand we're not a renewable in the strict
9 sense. I think the issues are quite similar. We did get sent to
10 you, and we're happy to be here, and we look forward to working
11 with you over the next few months.

12 The language of the bill is quite clear of 1890. It
13 talks about the policy of this state as still and has been for
14 many years to encourage and support the development of
15 cogeneration as an efficient environmentally beneficial
16 competitive energy resource that will enhance the reliability of
17 local generation supply and promote local business growth.

18 We certainly agree with that. We think the Legislature
19 simply erred in not exempting micro cogeneration. We understand
20 the difference between large scale cogeneration, the 25 megawatt,
21 50 megawatt plants. We understand that the utilities are
22 concerned about those as competition.

23 Those are different. They're selling power under PURPA
24 back to the utility grid. We are not. None of our projects
25 provide more than even half of the particular insulation sites

1 energy electrical load, so what we really are is nothing more than
2 a demand side management tool in the classic sense. We are simply
3 reducing the kilowatt demand. We are not going off the utility.
4 We're not going out to our customers or not going out to a
5 competitor utility in this new world of deregulation. The amount
6 of kilowatts that the customer still draws, we'll still be paying
7 CTCs. They'll still be paying standby cogeneration charges
8 whether they need them or not just as they always have.

9 The Commissioner spoke earlier about passing out the
10 dollars for renewables. I want to emphasize that we're not
11 looking for that at all. We understand we're not part of that
12 same \$540 million pool, and we're not asking to be. I'm not
13 asking for any new incentive for micro cogeneration. I am simply
14 asking for no new disincentives.

15 As John White mentioned earlier the CTCs would clearly
16 be a disincentive. If you reduce your electrical load, and yet
17 you, by using micro cogenerator, and then you have to, as a
18 customer for a period of two and a half years in the future,
19 continue to pay as if you are at the higher previous demand load,
20 it's pretty commonsensical to conclude that no one is going to be
21 using these products. That removes competition. It doesn't
22 enhance it as this bill is supposed to be doing because it
23 probably kills off the industry.

24 What I would be looking for and would be delighted to
25 discuss this in detail with you as these hearings proceed are

1 different types of, there are different types of relief that you
2 could address.

3 Number one, you should reward conservation, not punish
4 it as I just mentioned. And I think this bill right now with CTCs
5 does not reward conservation.

6 You could redefine small commercial. The bill currently
7 defines it as less than 20 kilowatts. One hundred and twenty-five
8 kilowatt definition for small commercial, which is not a lot, it
9 would be two of our units hooked in series, and incidentally
10 that's just about as large as any application we have right now
11 anywhere in the state or in the country, would certainly help us
12 in that respect.

13 You could extend the pipeline for exemptions from CTCs.
14 The large cogenerator projects are, as you know, much like any
15 power plant. They take years of permitting and planning and
16 regulatory approval. Our projects are not. They take a lot of
17 those same things, but they don't take that much time. They take
18 a period of months, not years, typically. And, therefore, to have
19 gone back retroactively to the PUC's decision of December of 1995,
20 any project that we talk to or have talked to or have put in in
21 1996 and in all of 1997 is now suspect, depending on what happens
22 with your study.

23 I don't think it would be, if all else fails and you do
24 not agree, that an exemption is warranted. Certainly hope you do
25 agree with me in the months ahead. But if you don't, if you move

1 the pipeline out to December of '97 before the CTCs kick in in
2 January 1 of '98, that would at least allow some certainty of the
3 industry and some planning for the far horizon.

4 And there's also a financing mechanism in there for
5 CTCs. It was something that Senator Peace asked me about and
6 caught me quite off guard, and I didn't know how to respond to
7 him. I had, frankly, not being that familiar with the bill at
8 that point, did not know how the funding mechanism in the CTC
9 pool, bonded pool, is supposed to work.

10 However, the more I thought about it I did comment to
11 him that it was a mistake to only allow an application of the PUC
12 for a funding mechanism for CTC relief for a project like ours.
13 And the way the bill reads you can only go hand in hand with your
14 local electrical utility.

15 We pointed out that that was a mistake, since at least
16 two of the utilities who were there made it quite clear that they
17 don't want any competition whatsoever from cogeneration, even
18 micro cogeneration, and there is no reason for them to cooperate
19 with us in going to the PUC.

20 So I think you could at least allow us to take on the
21 staggering burden of applying to the PUC as a small company, but
22 at least allow us to do a loan and not have to ask the permission
23 of the utilities.

24 You could exempt just public projects. If you don't
25 want a straight exemption, you could exempt public projects like

1 most of our customers. There are schools, health care facilities,
2 non-profits, municipal facilities, all tend to be small. It's
3 obviously a public benefit to all of us if those kinds of
4 facilities can reduce their operating costs by lowering their
5 electrical bills. It's in everyone's interest.

6 That would not allow us to sell to the small businessman
7 or woman for a period of years until the CTCs expire, but at least
8 it would allow us to survive, we think, and stay in business.

9 Finally, I'd like to point out a couple of things. FERC
10 in their Order 888 back in April, they realized the difference
11 between a cogenerator and someone shifting away from the current
12 utility. At page 452 I think it's worth pointing out they said,
13 "However this rule will not insulate a utility from the normal
14 risks of competition such as self-generation, cogeneration or
15 industrial plant closure that do not arise from the new
16 availability of non-discriminatory open access transmission. Any
17 such costs would not constitute stranded costs."

18 All through Order 888, and I tried to read a lot of it,
19 as you know it's about 1,000 pages, I started skipping through it
20 over the weekend off the Internet, believe it or not, and I
21 couldn't find any reference in there to someone reducing their
22 energy load but staying with that utility. Demand side
23 management, in other words, as being a stranded cost kind of
24 situation. In fact, it's the opposite. Every reference I found
25 was to things like departing the utility or moving to another

1 supplier.

2 So there is a distinction there. And I think FERC
3 recognizes, and I think frankly the Legislature did not. We are
4 not, so in that sense I don't think that we would qualify as
5 somebody that a stranded cost departing utility customer.

6 Finally, the docket today reads, directs you to look at
7 whether or not funding mechanisms for relief micro cogeneration
8 are necessary. And this may be just a semantic distinction, but
9 frankly I was there, as I said, for a couple of weeks in the
10 hearings. The direction, and particularly from Senator Peace who
11 spoke about a broad based study by, you, the Energy Commission,
12 including the possibility of CTC exemptions for micro cogeneration
13 and other funding mechanisms, that's essentially a verbatim quote
14 from the Senator, he went on at some length and talked about the
15 fact that micro cogeneration was not in the process. Had not been
16 considered until apparently I appeared.

17 He made it quite clear that he wanted to help. That
18 that's one of the reasons why they put this language in this bill.
19 It's not whether help is necessary. It's a direction, I think, to
20 this Commission and to your Staff how the help, what form the help
21 should take. Not whether it's necessary.

22 I'd be delighted to answer any questions. And again I
23 look forward to working with you in the coming months.

24 **CHAIRMAN IMBRECHT:** Thank you very much. You have a
25 good friend in Assemblyman Kaloogian, by the way.

1 **MR. RAFFESBERGER:** We are in his district. Our factory
2 is in his district.

3 **CHAIRMAN IMBRECHT:** They tend to follow, don't they.

4 **MR. RAFFESBERGER:** One would hope so, yes.

5 **CHAIRMAN IMBRECHT:** Are there any questions?

6 **MR. RAFFESBERGER:** Thank you very much for your
7 attention.

8 **CHAIRMAN IMBRECHT:** You're welcome very much.

9 Okay. Next Mr. Ralph Cavanagh. Probably natural to
10 follow on the DSM discussion.

11 **MR. CAVANAGH:** Mr. Chairman, I will speak briefly to
12 the merits, and my remarks will be greatly reduced because I will
13 follow your admonition to indicate who we agree with rather than
14 repeating them.

15 **CHAIRMAN IMBRECHT:** Thank you.

16 **MR. CAVANAGH:** I think an initial note of context --

17 **THE REPORTER:** Could you also spell your last name?

18 **MR. CAVANAGH:** Yes. My name is Ralph Cavanagh, C-a-v-
19 a-n-a-g-h. And since 1979 I've been the Co-Director of the Energy
20 Program for the Natural Resources Defense Counsel.

21 The note of context that I wanted to provide that I
22 think might be widely shared in this room is that AB 1890 was a
23 remarkable legislative achievement.

24 There were some here at the beginning of August who
25 offered to bet me substantial sums that there was no possibility

1 of a legislative solution. These were experts on the process.
2 The temptation to identify them publicly is almost overwhelming.

3 [Laughter]

4 **MR. CAVANAGH:** But I think that it is clear, and I
5 would like to acknowledge it, that one of the reasons this
6 achievement happened was because of the personal intervention, Mr.
7 Chairman, of you, your staff and your colleagues. That I think we
8 all owe a debt of gratitude to that effort.

9 We now have an opportunity to move ahead of the rest of
10 the country on restructuring, and this agency has become the
11 premier public agency in North America at least in terms of its
12 combined role in directing renewable energy and RD&D policy.

13 And in passing that legislation unanimously I submit
14 that the Legislature put an end once and for all to the tired old
15 debate that occasionally arises in this city about whether we need
16 an Energy Commission. Mr. Chairman, if we had not had an Energy
17 Commission, this bill assuredly would have required us to invent
18 it. I think we now all have cause to be glad we do have one.

19 And in that spirit a couple of suggestions as you enter
20 into your effort.

21 On the renewables specifically, and if you'd allow me,
22 Mr. Chairman, about 60 seconds on the RD&D, I'll close out what I
23 have to say and look forward to listening to my other colleagues.
24 On the renewables specifically, Commissioner Rakow, I think, said
25 what I hope is the clear direction of the Commission. That the

1 effort here, and I think this is also what the Legislature said,
2 is about letting markets decide winners and losers and empowering
3 customers. Which has been your consistent message throughout
4 restructuring.

5 The cynical chorus and people outside this state looking
6 at what California did with restructuring is, oh, there's a huge
7 pork barrel fund for renewable energy producers. And I look
8 forward to this Commission emphatically proving the nay- sayers
9 wrong.

10 Saying that markets decide means that winners and losers
11 emerge on the merits. It means that whose assembly district
12 you're in doesn't determine whether in fact you're successful in
13 ultimately setting the stage for what I'm confident will be a very
14 healthy and vibrant renewable energy sector in California.

15 Mr. Chairman, you asked what do you have to do up front
16 in the report. I would suggest that the Legislature clearly had
17 in mind, and the collaborative process that Bob Judd talked about,
18 has its best chance of succeeding if you make a few important
19 policy calls by March 31, 1997.

20 One is the allocation itself. One is the basic
21 structure of certification, which speakers have repeatedly said is
22 absolutely critical to making this work. And the third is some
23 basic calls as to the structure of market mechanisms that you want
24 to use.

25 If you as Commissioners can make those calls over the

1 course of the next few months, I agree with Bob Judd that the
2 spirit of cooperation that he accurately said has characterized
3 the process so far has every chance of helping you get the details
4 right. But there are some basic calls you really do have to make
5 up front, I think, to make that possible.

6 In addition, I wanted to urge that there's an immediate
7 challenge that you have on the RD&D side. And I know others will
8 get into this in more detail. But a critical policy issue that's
9 not on your list, and I think for a good reason, but that I want
10 to address very briefly, is the question of how much public goods
11 R&D ends up at this Commission.

12 Now that's a call that Mr. Gamson and his colleagues
13 have to make under the legislation, but I very much hope this
14 Commission isn't planning to be a silent bystander. The division
15 among the parties today in terms of how much investment
16 appropriately ought to be directed by this Commission under the
17 public good category and how much ought to be remaining in the
18 regulated transmission and distribution category, that division is
19 at least on the order today of \$30 million a year or \$120 million
20 over the four-year period you need to weigh in. And we very much
21 hope that you will.

22 In addition, and I'll resist the temptation to get into
23 any of the merits here, I think today is about setting an agenda,
24 as you address the question of how to handle the RD&D function, we
25 hope you will instruct the Staff to take a look at ways of taking

1 advantage of existing institutions and mechanisms.

2 As you well know, Mr. Chairman, the function of RD&D
3 administration is one that a number of California institutions
4 have some experience with, and it may not be necessary to reinvent
5 it completely within this Commission. The opportunity to let
6 other institutions have a competitive shot at some part of this
7 function is one that we would encourage you to look at.

8 And a final detail, but an important one we think in
9 terms of a definitional issue for both RD&D and renewables, and,
10 Mr. Chairman, we agree with you that integrating the emerging
11 renewables with the RD&D agenda is absolutely critical, you're
12 going to need to make some tough calls about what counts as a
13 renewable and emerging renewable.

14 And one issue we'd urge you to call out explicitly is
15 the question of the role of methane from landfills and waste water
16 which is increasingly important in California and is a matter of
17 both local and national environmental policy.

18 Parties in this room will have different positions on
19 it, but it's an important part of what you have to decide and just
20 determining who's going to qualify for the competitive process
21 that then we hope will ensue.

22 I'll leave it there. We obviously are committed, as all
23 of our colleagues in this room are, to help you make this work.

24 I do want to urge you, Mr. Chairman, some have said the
25 renewables groups just couldn't get their act together, couldn't

1 agree during the legislative process. I want to join with
2 everyone here who has expressed to you a sense of a cooperative
3 spirit. And I'll tell you I think from time to time when
4 agreement failed to emerge, it was as much a consequence of what
5 you know to have been an inhuman legislative schedule, as under
6 any underlying philosophical difficulties.

7 So we'll be, I think we all share the responsibility to
8 help you meet those impossible deadlines, and we're looking
9 forward to it. Thank you.

10 **CHAIRMAN IMBRECHT:** Thank you.

11 I would like to stress, at least from my perspective,
12 there is no intention to try to reinvent new institutions. We
13 simply don't have time to do it.

14 I guess I would also encourage comments over the course
15 of our deliberations as to whether or not we ought to focus on one
16 option relative to those issues or we ought to do some
17 experimentation.

18 I guess from my perspective at least I don't know that I
19 can draw a conclusion at this point as to which institutions are
20 the best. And probably more importantly I guess my bias, if I
21 have one on these questions, is that one size probably doesn't fit
22 all in this context.

23 I'll leave it at that.

24 Next Mr. John Grattan.

25 **MR. GRATTAN:** Good morning, Commissioners. Beautiful

1 morning. Morning in California energy. We're here at the era of
2 the dawn of competition, and I have a few modest remarks.

3 Our firms represent a number of renewable projects and
4 renewable companies, and while they may disagree perhaps
5 vehemently on who would be most worthy to have a share in the
6 incentive fund, which the Commission will allocate and administer,
7 I think they would be in overwhelming agreement that they are all
8 in fact renewables.

9 We believe that the test for renewable is pretty much a
10 bright line test. We've submitted comments which track the
11 existing statutory sections. And the Commission, of course, has
12 an important role not just in allocating the fund but in
13 certifying projects as renewable.

14 And here I start to echo some comments from Jan
15 Smutny-Jones and John White and Ralph Cavanagh that we had before.
16 And I'll be very brief here. I'll underline them.

17 Certification as a renewable is a project ticket into
18 the market. A project ticket into early entry into that market.
19 And under Section 365 of the legislation a ticket into that market
20 where it is customer driven. That section is activated by
21 customer requests, and it also allows a renewable project to blend
22 its output with a more traditional energy project. One that may
23 be, in fact, cheaper.

24 So we urge you here to bifurcate your responsibilities
25 under Sections 381 and 383. You have an allocation process. You

1 have a certifying process. We think that the certifying process
2 ought to be simple, ought to be easy, perhaps ought to be a
3 self-certification process.

4 In doing so, you will free up, and if you act in a
5 timely manner, you may free up a variety of renewable projects to
6 at least attempt to compete on the open market. So we're urging
7 here that the Energy Commission be both creative and non-
8 intrusive and to view again this certification role as one which
9 is susceptible to a self-certification process.

10 And that's all I have. Thanks for your attention.

11 **CHAIRMAN IMBRECHT:** Okay. Questions?

12 Thank you, John.

13 Next Mr. Hap Boyd.

14 **MR. BOYD:** Thank you, Mr. Chairman.

15 I represent ZOND Corporation. It's somewhat difficult
16 to follow after John White and Jan Smutny-Jones. I belong to both
17 their organizations. And also Ralph Cavanagh who belongs to CEERT
18 because those are three guys who could get a wrong number and talk
19 for half hour or so.

20 [Laughter]

21 **MR. BOYD:** I really really will be brief. I would like
22 to thank the Commission for their support of renewables over the
23 years. Particularly the Chairman who has traveled worldwide
24 trying to help us promote our products overseas.

25 And that's one of the things that I wanted to mention.

1 I think we're going to look at cost effectiveness and the
2 definition, and what we really need to look at is value. Cost
3 effectiveness is part of value.

4 And we're also looking at dispersing a pool of money
5 here in California, but we ought to be thinking globally instead
6 of just in California because a number of these companies,
7 particularly the micro cogen people like that, wind energy and
8 solar and others, will be going into overseas markets and will be
9 bringing benefits to the state. So we need to quantify these as
10 well.

11 And that's all I have to say.

12 **CHAIRMAN IMBRECHT:** Okay. Thank you, Hap.

13 Next Mr. Jim Cole. Oh, pardon me.

14 Okay, I'll try to keep these segregated. Mr. Les
15 Nelson. Dr. Barry Butler.

16 **MR. NELSON:** Good morning, Chairman and Commissioners.
17 We prepared a very graphics oriented presentation today that will
18 no doubt be a little bit shorter when it's reduced to a verbal
19 version.

20 **THE REPORTER:** Could you identify yourself, please?

21 **MR. NELSON:** I'm Les Nelson. And I'm here today with
22 Dr. Butler to represent the Solar Energy Industries Association
23 and the California Chapter of that association CALSEA.

24 Between these two organizations we represent close to
25 500 companies across the country but with the preponderance of

1 those companies located here in California involved in various
2 aspects of solar energy.

3 And one of the things that we're most interested in is
4 the emerging technologies. So I'd like to address that
5 specifically here this morning, and I'll offer a few short
6 comments, and Dr. Butler will follow up with some more specific
7 information.

8 One of the things that we've attempted to do, and with
9 some interface with CEC Staff, is come up with a potential
10 definition of emerging technologies since it's going to be one of
11 the more important topics that will be used to segregate new and
12 emerging technologies.

13 I'll just run briefly through them. You may recognize
14 some of them since they're in part oriented or based on
15 definitions that are being employed in the air quality arena.

16 Technologies shall have completed the research,
17 development and demonstration process and shall be ready for or
18 have already begun mass production and construction or
19 installation of generating facilities utilizing the technology.

20 The technology is commercially available with at least
21 one vendor offering the equipment for regular or full scale
22 operation in the United States.

23 The technology's reliable and has proven in predictable
24 performance with at least one year of demonstrative performance in
25 field conditions.

1 Generating facilities utilizing the technology will be
2 designed and operated primarily to produce electricity as opposed
3 to the collection of research data.

4 And finally, and I think the most important, one of the
5 key aspects and one of the most important reasons why CALSEA and
6 CR are gratified that the terminology including emerging was
7 included in AB 1890 is that we believe that there needs to be
8 substantial evidence that by accelerating the development of
9 markets for the technology during the years in question, 1998
10 through 2001, generation costs can be significantly reduced to
11 levels where the technology will be cost competitive or close to
12 cost competitive with other renewable and non-renewable
13 technologies which produce power.

14 So I think what we really hope to be able to demonstrate
15 quite conclusively in the process during which we try to identify
16 what are emerging technologies and what are not is that there is a
17 very good evidence that these technologies are on a significant
18 and protracted price reduction curve, and that we hope that
19 whatever technology goes into this period will come out of this
20 period significantly less expensive and much more competitive than
21 it is today.

22 For this reason and because I believe as do my
23 colleagues that the issues facing the Commission in regards to how
24 to deal with existing versus new and versus emerging technologies
25 is that as much as possible these three arenas ought to be handled

1 differently. There is different issues associated with how
2 emerging should be viewed in regards to what is going to be the
3 best process to move it forward and down that price curve.

4 So we cannot compete with new and with existing, all new
5 and all existing technologies today. However, what we can do is
6 demonstrate a consistent downward price curve, and that's the
7 baseline that I think we want to move forward with. But to the
8 extent possible, we'd strongly urge bifurcating, to coin a phrase,
9 those three efforts within the Commission.

10 Finally, I would be remiss in my duties if I did not
11 address one topic which I've been in front of the Commission for
12 on a regular basis over the years, and that has to do with small
13 scale solar thermal technologies.

14 This restructuring process has not been an arena for
15 that type of technology aside from the fact, or I should say it's
16 not an emerging technology by the strictest definition of the word
17 because it does not produce electrons, however, it is a renewable
18 technology that reduces the consumption of electrons.

19 And I think, and I've spoke with many of the people most
20 involved in the energy conservation, energy efficiency arena in
21 this proceeding, that there should be a place for this technology,
22 distributed renewable technologies that reduce consumption of
23 electricity, or as advocated by Office of Ratepayer Advocates,
24 even gas. So I would urge that that central theme be considered
25 while this process moves forward.

1 Thank you.

2 **CHAIRMAN IMBRECHT:** And your referencing in principle
3 there the reduction of water pumping or what?

4 **MR. NELSON:** No, I'm not talking about an electron
5 generating technology, which would, in fact, be photovoltaics,
6 which we are very obviously much involved with as well. I'm
7 talking about small scale solar thermal technologies such as water
8 heating and commercial applications of solar thermal technologies.

9 There is support in many in the energy efficiency arena
10 to make energy efficiency funds available for support of those
11 technologies, and we strongly encourage that that avenue be
12 pursued.

13 **CHAIRMAN IMBRECHT:** We'll examine it. I'll simply say
14 that to the best of my current perception the funds we're talking
15 about in this case are directed at the electric utility industry.
16 And so unless we can find a very clear nexus, I think it would be
17 debatable. Until there is a surcharge extended to the natural gas
18 industry in the state of some sort for R&D, which I don't see us
19 taking on any time soon, I believe legislation pretty much focuses
20 on the electric side.

21 **MR. NELSON:** You're right, it does. And we were
22 somewhat surprised to see ORA's in that regard, too, but felt it
23 useful to embrace them since they --

24 [Laughter]

25 **MR. NELSON:** However, I would point out that there are,

1 according to the CEC's numbers, approximately 300,000 electric
2 water heaters in the State of California. So I think there is
3 ample opportunity to pursue that. And from the customer and the
4 utility's perspective, a solar water heating system is no
5 different than DSM or another technology that reduces consumption
6 at the site.

7 **CHAIRMAN IMBRECHT:** I'm not arguing with you. I simply
8 find it reflect upon what our particular charge is at this point
9 and time.

10 **MR. NELSON:** I appreciate that direction. Thank you.

11 **CHAIRMAN IMBRECHT:** Okay.

12 Dr. Butler.

13 **DR. BUTLER:** Les has sort of outlined what we think the
14 technologies are. I'd like to speak a little bit about the
15 technologies that are in the state that do use sun for fuel, and
16 also not from just around the state, from around the country,
17 there is a real opportunity here, I think, to bring federal monies
18 and other monies to the state to help really embed solar
19 technologies and the jobs that they represent here in California.

20 The aerospace industry is reinventing itself. You know,
21 I'm from San Diego and a part of that industry. And we developed
22 solar dish sterling technology and SAIC and MacDonald Douglas are
23 both, you know, major players in that industry.

24 Solar Power Tower has Bechtel Rockwell and SAIC
25 involved, and that's another, you know, that's a second technology

1 that's electric producing, and you know Solar II has just been
2 brought back on line.

3 Flat plate photovoltaics, we have Siemen, Varian, Amoco,
4 Enron. For concentrating PV we have Amenex and United Solar.
5 Parabolic, Tross, Luz and KGC. And for hot water we have, you
6 know, Sun Earth and Radco.

7 So there are a number of technologies that are embedded
8 in the state.

9 We believe that, you know, tens of thousands of jobs are
10 going to be created as renewables become a viable business. You
11 know I've been in the industry association now at the national
12 level and working with our senators and congressmen from this
13 state to try to develop, you know, the renewables is a business.
14 And I think over the last few years we've actually, with tax
15 credits going away, the strong have survived, and the business is
16 coming along. So the question is is there an opportunity in this
17 restructuring to embed those jobs and the economic base that they
18 represent here in California.

19 You know, as Les said we had a presentation full of lots
20 of graphics, but there is a large market. And PG&E has
21 characterized that market, you know, as well as others, but from
22 stand alone, the grid support, to peak power to bulk power, and
23 each one of those sort of goes up by an order of magnitude.

24 If you're \$12 a watt or above photovoltaic demonstrated,
25 you could sell 40 megawatts a year. If you get to 5 to \$12 a

1 watt, you go up to 400 megawatts a year. And if you go down to 2
2 to \$5 a watt, you can get the 4,000 megawatts a year of annual
3 sales. Those are big numbers, and those are worldwide, and I
4 think they're substantiable.

5 The issues come, and the world needs the technology, but
6 the world won't buy from us unless we can sell it to ourselves.
7 And that's a major opportunity that the CTC may provide.

8 Our products must be reliable. And not just reliable on
9 paper. You have to make them reliable so that they will perform.
10 And that means you have to have demo fields. And that's why Solar
11 II was so important. Must produce, and the SMUD, PV USA and
12 comparative testing and real data are critical to have a business.
13 And we have to demonstrate that they live a long time.

14 So there is a market. We've demonstrated that the value
15 overlaps costs, and we've demonstrated, I think, that the cost of
16 these technologies has been coming down as a function of time.
17 There's a federal program in place that's been trying to pick
18 winners and losers and encourage people down the path to
19 commercialization for photovoltaics over thermal, wind, biomass.

20 And what we see the opportunity here in California,
21 since the level of revenue, or the monies that you have at your
22 command, are not equal to but very significant when compared to
23 the federal investments.

24 If you look, you see that the federal government in
25 photovoltaic power and solar thermal is investing \$82 million in

1 1997. And in renewable technologies, which include wind,
2 geothermal and biomass, they're adding another 85 million in 1997.

3 So those are the value of their funds. And so what
4 California's going to do is significant. And what we see is it
5 will reduce the cost of these emerging technologies sooner, and
6 most importantly it will bring targeting of those jobs into
7 California. So it will generate a significant economic base in
8 this state that will pay taxes and better the citizens of
9 California.

10 So we would say that all these technologies are not on
11 the same path. So please consult with industry as you generate
12 the approaches to fill these needs.

13 Considering megawatts, which is what Les was saying.
14 You know, I woke up and saw in the paper, you know, San Diego Gas
15 and Electric is, you know, getting together with The Gas Company.
16 And so these things are going to start to blend together so there
17 may be some opportunities.

18 **CHAIRMAN IMBRECHT:** Could I ask you to please
19 summarize.

20 **DR. BUTLER:** So the leveraging, the federal resources
21 will also leverage private resources in the state and help us to
22 create the sustainable business here. And I'd like to encourage
23 you to do that.

24 **CHAIRMAN IMBRECHT:** Thank you very much. For your
25 information, the repowering of the Solar Power Tower, as you

1 referred to it, we were the single largest public investor in it.
2 This is not entirely a consensus item here on the Commission, but
3 we currently own PV USA, and I would simply add that I was one of
4 the early PV pioneers and have four kilowatts of photovoltaics on
5 the roof of my home here in Sacramento. So I think you are
6 preaching at the choir in many respects on these issues. But I
7 thank you in any case.

8 We have two, three, four, five, six, seven, eight more
9 people who wish to address us on renewables. We had planned to
10 take a lunch break at this time, and so let me suggest that we
11 return, if that's agreeable to everyone, at 1:15.

12 I thank you all for your attention and participation.

13 **VICE CHAIR RAKOW:** 1:15 or one o'clock?

14 **CHAIRMAN IMBRECHT:** Excuse me. Actually I have one
15 other announcement I need to make.

16 To our listeners on the Internet, our Real Audio
17 broadcast will resume about two minutes prior to the scheduled
18 start of the afternoon session. We also encourage you to send
19 comments about our use of the Internet and the audio technology by
20 using the Online E-mail message link at the bottom of the Real
21 Audio page or send E-mail to our own Web Master site.

22 Thank you.

23 [Luncheon Recess from 12:05 to 1:34 pm.]

24 **CHAIRMAN IMBRECHT:** If I could ask you all to please
25 take a seat. Welcome to round two.

1 We have several people who still wish to address us on
2 renewables, and then we'll turn to the irrigation district issue
3 and finally RD&D.

4 First is Nancy Rader.

5 **MS. RADER:** Good afternoon, Chairman and Commissioners.
6 My name is Nancy Rader. I'm the West Coast Representative for the
7 American Wind Energy Association or AWEA. We were very actively
8 involved in the Conference Committee process and plan on being
9 actively involved in the upcoming process.

10 I wanted to make a few comments specifically related to
11 the issues that were identified in Appendix B. Our issue number
12 one, the definitions. We just wanted to caution against trying to
13 find specific legislative intent in each and every term in the
14 bill.

15 I think as several people have noted the time available
16 in the Conference Committee process, particularly in the end when
17 this language was being drafted, was quite chaotic, and I think it
18 would be wise to look at the overall intent of the bill which is
19 to preserve and expand the existing base renewables. And to do
20 that cost effectively rather than to try to find intent in each
21 and every term.

22 And I'll just give you a couple of examples. One is
23 seeking to define the term "cost effective" itself, which I think
24 could be a very time consuming and contentious process. Rather, I
25 think we should seek to achieve overall program results that cost

1 effectively meet the intent of the legislation.

2 Similarly focusing on defining the words "renewable
3 resource provider" I think would be less productive than looking
4 to see how claims of renewable energy generation can best be
5 verified. And that may entail certifying not providers but, in
6 fact, certifying generation.

7 So I hope we don't get too caught up in the actual words
8 that are in there. And step back and look at the intent of the
9 provision which I think was to verify claims of green energy.

10 Another example is the word "in state." I think before
11 we look at how to define the words "in state," we should step back
12 and make sure that the requirements of in state pass muster with
13 the Commerce Clause. So I just hope that we take a step back and
14 look at the intent of the bill.

15 On the issues of three to five about mechanisms for
16 allocating funds, it's our understanding that the Legislature is
17 seeking the Commission's advice about which of the mechanisms
18 listed would be most appropriate for allocating the funds, and
19 that it was not the Legislature's intent to prescribe each of
20 those mechanisms necessarily.

21 People have noted we couldn't come to closure on which
22 mechanisms were best, and so the whole thing was tossed to you all
23 to help us figure that out. I don't think the Legislature meant
24 to prescribe each of those mechanisms. And it was unclear from
25 your listing of issues and Appendix B whether you read it that

1 way, and I just wanted to offer our interpretation which is that
2 we need to look at which of those mechanisms are best. And it may
3 be more than one. And it may be all of them. But I think we need
4 to decide that.

5 On issues seven to nine, particularly issues number
6 eight and nine, were a little bit vague as they were written. I
7 wasn't sure how to interpret them, but I had some thoughts and
8 some additional questions that could be clarified there.

9 One is how can the total amount of funding available be
10 determined. That is, there is some uncertainty about whether the
11 total funds is 465 million or 540 million or even more. And if
12 it's more than 465, where is that money going to come from. From
13 which utilities, and on what schedule. I think that needs to be
14 defined in the next round of legislation.

15 Also, another question is should there be an upper and
16 lower limit of funds available for each renewable resource and
17 technology or even perhaps to a single company. I think those are
18 additional questions that should be added to the list.

19 And finally, though, on issue number ten, though the
20 Commission was not directly tasked to look at this, we think it
21 would be appropriate for the Commission to expand its
22 consideration of the issue of the voluntary customer contributions
23 to renewables which is in Section 381E and to consider making
24 recommendations to the Legislature about how this provision should
25 be implemented. Because it could be, as written, it's very vague

1 and could be interpreted widely and could be made to be very
2 effective as a way to generate customer support for renewables.

3 So thank you very much and look forward to the process.

4 **CHAIRMAN IMBRECHT:** Thank you. That was a very
5 succinct and useful comments for us.

6 I have also been asked to emphasize that if you could
7 please introduce yourself and your affiliation before beginning
8 your presentation. Apparently we are getting some people picking
9 up on the Internet, including some calls from the Wisconsin Energy
10 Office. There's a lot of attention to this discussion.

11 Also, Mr. Gamson, on behalf of Commissioner Neeper
12 asked me just prior to the luncheon recess he would like to make a
13 couple comments. If you push the button in.

14 **MR. GAMSON:** New technology's too difficult for me I
15 think. I'd like to thank Chairman Imbrecht and the Commission for
16 inviting Commissioner Neeper to be here today. He was unable to
17 attend because of some of his other commitments back at the PUC,
18 but he does appreciate the invitation. And I'm glad to be here
19 for him.

20 AB 1890 presents a lot of opportunities and a lot of
21 challenges as we all know. Some of the challenges include reading
22 the bill.

23 [Laughter]

24 **MR. GAMSON:** Certainly understanding the bill is
25 another challenge, but I think the biggest challenge is going to

1 be implementing and implementing it in a timely manner.

2 We're all working together to do that. It's going to be
3 hard, but I think that an event such as this, this hearing today,
4 the hearings that are going to go on from now, the working groups
5 and the rest of the process, are going to be very fruitful, and
6 we're all going to be working together to make it happen in a
7 timely manner.

8 I wanted to bring to today's meeting a spirit of
9 cooperation when we talk about opportunities. This is a terrific
10 opportunity for the PUC and the CEC to start working together even
11 more than we have in the past. And to especially work together on
12 the overlap issues of RD&D, and to a certain extent renewables and
13 irrigation districts, direct access, things like that.

14 As we look through the bill, we find that everything is
15 intricately entwined. There is overlap in just about everything.
16 That if the CEC cannot work independently and do its thing, the
17 PUC cannot work independently and do its thing, whatever we do
18 affects what the CEC does, whatever you do affects what we do.
19 And in that spirit Commissioner Nepper and the rest of the
20 Commissioners at the PUC would like to invite the CEC
21 Commissioners to participate in our processes.

22 We're going to have meetings at the staffing level to
23 talk about, at the staff level, to talk about how we can
24 cooperate, to talk about what we can do to have a common
25 interpretation of the bill and how we can move forward from here

1 on in. And we appreciate the opportunity to participate today and
2 in the future, and we hope that you'll take up our invitation as
3 well.

4 Thank you.

5 **CHAIRMAN IMBRECHT:** Thank you very much. We welcome
6 those comments.

7 I would also like to make it clear that while we do
8 contemplate doing committee assignments before the close of the
9 day, that I think in many instances you will see more than just
10 two members of the Commission participating in those
11 deliberations. As I said earlier, we all have an interest in the
12 broad scope of these discussions, and to the extent the time
13 permits, the schedule permits, I think you'll see even greater
14 participation.

15 Next Mr. Brent Haddad.

16 **MR. HADDAD:** Thank you. My name is Brent Haddad. I'm
17 a Post Doctoral Researcher at UC Berkeley, and my expertise is in
18 the creation of markets for environmental benefits.

19 I would like to offer these comments. First, time is
20 short, and the report is due, and the questions are difficult
21 enough that the Commission faces, and there is a temptation to
22 jump right into the details of what needs to be done. But I
23 suggest rather that you, the Commission, take a moment, if only a
24 brief one, to start with the discussion of vision. And that is
25 what kind of electricity market would you like to see in

1 California five years from now and ten years from now.

2 This is a normative question. This is important
3 because, at least in my reading, a vision for the role of
4 renewables in the California electricity market does not emerge
5 from the legislation, and so there is a need to discuss it. It
6 appears instead that we're sort of operating on our own
7 assumptions of where we think the market will go.

8 In fact, the temptation is to say, well, we'll set up a
9 market, and let the market decide what happens to renewables. But
10 that logic fails because we're setting up the market, and we need
11 a prior vision in order to put a market in place.

12 And the themes that I believe should be addressed, if
13 the Commission pauses to consider this issue, are what kind of
14 industrial organization would we like to see, what quantity of
15 renewable kilowatt hours would we like to see in California five
16 years from now and ten years from now, what level of involvement
17 of end use customers and renewables purchased decisions and what
18 post transition costs of renewable generation would we like to
19 see. And other similar themes.

20 If you choose to think about these questions in an
21 organized way, I would suggest also that you abandon the
22 terminology that pervades the current legislation. Such as
23 existing, new, emerging and the 50 percent threshold and so forth.
24 And rather just focus on a picture of where you'd like to see this
25 process go.

1 And I believe this kind of early discussion will help
2 you in the coming weeks when you're called upon to integrate all
3 of the pieces that will come forward to answer the specific
4 questions.

5 Thank you very much.

6 **CHAIRMAN IMBRECHT:** Thank you.

7 Next Christo Artusio. Hope I've pronounced that
8 correctly.

9 **MR. ARTUSIO:** Mr. Chair, Commissioners, my name is
10 Christo Artusio, and I'm from the Environmental Defense Fund.

11 I would like to add my voice today to those of Ralph
12 Cavanagh, John White and Jan Smutny-Jones. We would propose that
13 any discussion of AB 1890 at least touch on the following issues.

14 In brief, streamline implementation process. Any
15 proposed procedure should be administratively simple for the
16 benefit of the CEC, the renewables industry and ultimately the
17 customers.

18 Customer orientation. Because it is ultimately
19 customers that will drive the renewables market. Proposals to
20 administer funds should focus on the customers.

21 Market base mechanism. Allowing market competition to
22 allocate funds is not only mandated but is also the most efficient
23 mechanism for achieving environmental and other goals.

24 Effectiveness. In considering allocation of funds among
25 existing, new and emerging renewables we should consider foremost

1 the effectiveness of the funds and achieving the desired goal.

2 Again, I'm not saying anything new here, but I would
3 like to add EDF support to that of NRDC and John White with CEERT.
4 Thank you.

5 **CHAIRMAN IMBRECHT:** Thank you very much.

6 Mr. Lon House.

7 **MR. HOUSE:** I submitted written comments. They'll
8 suffice. Thank you.

9 **CHAIRMAN IMBRECHT:** Thank you very much.

10 Jody London.

11 **MS. LONDON:** Good afternoon, Commissioners, and members
12 of the audience. My name is Jody London, J-o-d-y, L-o-n-d-o-n.
13 I'm here today representing Working Assets Green Power.

14 Before I talk about our specific interests in the
15 renewable activities that are going on at the Energy Commission,
16 let me briefly explain Working Assets because we're a relatively
17 new player at the CEC.

18 Working Assets offers its customers donation linked
19 consumer services. We currently offer long distance telephone
20 service and credit cards, and just this past year we've introduced
21 a paging product as well as Internet services.

22 Every time a customer uses a Working Assets product we
23 donate a percent of our revenue to non-profit groups. And when we
24 introduced our credit card in 1985 we were the first donation
25 linked credit card in the country.

1 We serve 250,000 residential and small business
2 customers nationwide, including over 75,000 in California. We've
3 been very interested in adding electricity to our product line.
4 Specifically renewable power.

5 And currently we are participating in both the New
6 Hampshire and the Massachusetts pilot programs that are going on.
7 Where we're signing up many residential customers who want
8 renewable power.

9 We've been tracking very closely and participating in
10 some of the many working groups sponsored by the California PUC.
11 As a new entrant into the electric services market we have many
12 concerns that are specific to issues under the PUC's jurisdiction.
13 Assuming that the concerns about unbundling of non-monopoly
14 functions can be addressed, Working Assets fully expects to begin
15 offering green power in California on January 1, 1998.

16 It's our opinion that the renewables market in the long
17 term, after stranded costs are paid off, will be dependent on
18 residential customers. Industrial users will always move to the
19 lowest price and most reliable power. And, therefore, in the long
20 run will not be primary purchasers of renewables.

21 We've seen this in our long distance telephone service.
22 We have far more acceptance for socially responsible service among
23 residential customers than business customers.

24 We share the view of many of the parties today that a
25 portion of the renewables monies should be used to offset the CTC

1 for those residential customers who purchase the 50 percent
2 renewable portfolio. It is vital for the long term that this
3 money is used to stimulate the residential market for renewables.

4 The industrial users could rapidly use up whatever
5 amount is allocated and after 2002 switch to the lowest cost
6 provider regardless of the source of power. This would
7 effectively eliminate renewable power from the California power
8 mix in the long run.

9 However, using the money to subsidize the high cost of
10 renewable power for the residential market will build a large
11 grass roots constituency that will become less concerned with
12 price and more concerned over time with the environment and other
13 services and products offered by marketers and aggregators. And
14 this will ultimately assure the long term viability of the
15 renewables market.

16 We've learned a lot of things from our participation in
17 the pilots in New England. One of the things that we've learned
18 is that developing a direct market for renewables means you have
19 to start with the existing resources while you keep an eye to the
20 long term development of new technologies. Our goal as a green
21 marketer and a socially responsible company is to affect a long
22 term change in the market in favor of clean and renewable
23 resources.

24 This competitive electric services market is in its
25 infancy. Restructuring proceedings around the country and

1 subsequent competition will change decisions about which resources
2 to use. We plan to give consumers a greener option than they have
3 currently. We realize that this is going to take a long time.
4 New resources simply don't come on line overnight.

5 For this reason we urge the Commission to administer any
6 available funds in a manner that best bolsters renewable resources
7 to compete in a non-monopoly world. We favor market based
8 approaches that allow customers to signal their preferences
9 through their purchasing power. In a competitive market
10 entrepreneurs will identify unmet demand and come forward to meet
11 it.

12 One of the best ways to further the renewables industry
13 is to increase demand among consumers. This is why we favor using
14 the CTC rebate as an incentive for customers who purchase from a
15 renewable portfolio.

16 We also believe that customers gain the most value from
17 a diversified market with many providers. For this reason the
18 Commission should not disperse funds in a way that would give
19 incumbent utilities or their affiliates any more market power than
20 they have today. If anything, the renewables program should be
21 viewed as a way to diminish the market power the incumbents bring
22 to the playing field.

23 Rather than develop a complicated and costly
24 certification for renewable resource providers, we suggest that
25 all providers, including utilities, disclose information about the

1 power plants which comprise their portfolio over a given time
2 period, and the percentage of power from those plants.

3 This requirement could become part of an energy
4 company's certificate of public convenience and necessity. And
5 companies that do not provide this information could be subject to
6 regulatory sanction.

7 In a competitive market with product differentiation
8 customers may easily become confused when many providers start
9 claiming that they are the cleanest or greenest. Working Assets
10 does not believe that the Commission or any other organization or
11 company should determine the quote, unquote, best or most
12 preferable technology. But we do believe the government or some
13 other non-affiliated entity can play a crucial role in providing
14 factual unbiased information about different generation
15 technologies.

16 We're looking forward to participating in the different
17 working groups that you set up, and I'm sure this is the beginning
18 of a long conversation. Thank you for your time.

19 **CHAIRMAN IMBRECHT:** I'm going to stipulate to that.
20 Thank you very much.

21 Tom Hinrichs. Tom.

22 **MR. HINRICHS:** This is <http://column.pecie>. Hello to
23 you all in RealAudio™ land.

24 [Laughter]

25 **MR. HINRICHS:** I have a son that teaches via the

1 Internet and got involved in Real Audio about a month ago. About
2 the only thing I can say, Steve, is that he's become on a first
3 name basis with his Internet provider and CompUSA.

4 I represent the Geothermal Energy Association. And
5 first of all, I just want to thank you for providing a special
6 committee on renewables, Commissioners Moore and Sharpless. We
7 look forward to your leadership in this.

8 We renewables are here because we couldn't really get
9 our act together in the last moments of the Legislature. We were
10 together extensively on the noble RPS standard. We lost that.
11 And because of that it's taken us awhile to react, and I look
12 forward to your forum to continue that dialogue so that a
13 consensus can be gained.

14 I agree with Bob Judd that that can be done. I
15 appreciate establishing Marwan as the project manager. He
16 participated and was a facilitator in a lot of the working group
17 meetings, and I'm sure will continue in that role. He has a
18 little different personality than Steve Peace, but I think we'll
19 probably be able to get the job done.

20 [Laughter]

21 **MR. HINRICHS:** So the issues that I see that we in the
22 renewable industry need to focus on quickly and come to a
23 consensus are what is the difference between a new and an
24 existing plant and how are the funds to be allocated. And we'll
25 be there. Thank you.

1 **CHAIRMAN IMBRECHT:** Maybe you can help me. What is a
2 noble RPS? Is that what you said?

3 **MR. HINRICHS:** Oh, the RPS is the renewable portfolio
4 standard that was established in the PUC decision.

5 **CHAIRMAN IMBRECHT:** Oh, thank you. Yes, I'm aware of
6 the issue. Thank you very much.

7 Mr. Herb Healy.

8 **MR. HEALY:** Thank you very much. My name is Herb
9 Healey, H-e-a-l-y. I represent Onseek Corporation [phonetic].
10 We're a manufacturer of fuel cell power plants. Thank you very
11 much, Mr. Commissioner and Commissioners for this opportunity.

12 I'll be very brief because I think my concerns and
13 issues have already been echoed by Mr. John White and a couple of
14 others who have spoken. On the other hand, since I came all the
15 way from Connecticut, I felt that it was appropriate to at least
16 stand up and be acknowledged.

17 I would like, obviously as a supplier, my agenda to you
18 people is very clear. I have, obviously, two issues on the table.
19 One being the fuel cell, the position that fuel cells should be
20 treated as fuel switching for purposes of avoiding the CTC. And,
21 again, John White spoke very eloquently about that position.

22 I'd like to make it clear that this is not, in my
23 opinion, a supplier issue. Obviously as a supplier we have our
24 agendas, but this is really a customer, an end use energy consumer
25 issue. And so what we're really talking about here, and I want to

1 make it plain and clear, that we're talking about not
2 disincentivizing an already existing market out there. We already
3 have 14 fuel cell power plants in operation here in California.
4 We certainly intend and expect to have a lot more in the future.

5 To the extent that the CTC is not applied to these
6 projects, that certainly is a positive for fuel cells. But
7 understand that the language talks about fuel cells avoiding the
8 CTC from the standpoint of fuel switching. And our position is,
9 although I would argue vehemently that we should be able to avoid
10 the CTC in any rate, I will say that as pertaining to fuel
11 switching we think it is appropriate because fuel cells, at least
12 by an order of magnitude as compared to any other fossil fuel
13 generator, are the cleanest option.

14 And to the extent that these fuel cells are installed in
15 local on site projects, they do, for the most part, represent fuel
16 switching either on a local level from the standpoint of a
17 petroleum base feed stock or further up the line from the
18 standpoint of central station generation where that fuel switching
19 may be coal or nuclear.

20 The second issue which is already also been spoken of is
21 one of definition. In particular the definition of what are
22 renewables, and what are new and emerging technologies. I think
23 clearly that's an issue. The whole concept of the definitions is
24 an issue that needs to be resolved first and foremost on the
25 agenda before going on.

1 Thank you very much for your time.

2 **CHAIRMAN IMBRECHT:** Can you tell me typically what are
3 the size of your fuel cells?

4 **MR. HEALY:** Our fuel cells are 200 kilowatt power
5 plants. Thank you.

6 **CHAIRMAN IMBRECHT:** Thank you very much.
7 Ms. Jane Luckhardt.

8 **MS. LUCKHARDT:** Hi. My name is Jane Luckhardt, and I'm
9 here from Marron, Reid and Sheehy. And we have filed written
10 comments, and I urge you all to read those. And so I will simply
11 try and summarize quickly.

12 **CHAIRMAN IMBRECHT:** Extensive written comments I might
13 add. This is the thickest.

14 **MS. LUCKHARDT:** That's the attachment.

15 [Laughter]

16 **CHAIRMAN IMBRECHT:** I think this certainly qualifies as
17 the longest document that was filed today.

18 **MS. LUCKHARDT:** Gene will be very pleased to hear that
19 actually. That's all I have to say.

20 [Laughter]

21 **CHAIRMAN IMBRECHT:** Billed on a per page basis?

22 **MS. LUCKHARDT:** Fair enough. Fair enough. All right.

23 Initially in addressing renewables, I would like to kind
24 of take off on Commissioner Rakow's comments of wanting to
25 establish a market for renewables where they can compete beyond

1 the year 2000, beyond the year 2001. And a big issue as to
2 whether they can compete or not will be whether there is a
3 realistic market price available for this kind of power coming
4 into the system.

5 And part of the problem is, or some of the issues that
6 are going to be facing renewables, is that renewables are
7 supplemented through, or at least the funding is coming through
8 2001, but other supplemental programs will continue on beyond
9 that. And we see really the supplements continuing for ten years.
10 So that you don't have a true market for at least ten years. And
11 with the PUC admitting that sometimes the market price coming out
12 of the power exchange is going to be zero, there is no way any new
13 renewable can compete with a market price of zero.

14 So there are some issues that the Commission needs to
15 analyze in looking at renewables. And that is one of them. You
16 know, how do you create a market where they can compete with
17 programs that are continually subsidized with CTC that will
18 continue in certain areas past 2001. The price is paid to
19 reliability plants and other artificial mechanisms that will keep
20 that market price lower than it would normally be out of a clean
21 real competitive market.

22 And, you know, I would like to continue on in that in
23 that to follow the statements of our Berkeley post-doc student, I
24 guess that's what he was, Mr. Haddad, saying that you do need to
25 have some goals and outcomes for this process. That without some

1 specific goals and outcomes that it's just going to be a scatter
2 approach to renewables. You need to decide exactly what it is you
3 want to do.

4 And maybe you do want to follow Commissioner Rakow's
5 suggestion of creating a renewable market that will survive, but
6 you need to establish that to really focus how to effectively
7 spend the money.

8 And part of this should be used to establish using your
9 resources, your staff resources, to establish what an actual
10 market price is. Taking into account all the subsidies that are
11 paid to other entities who are producing power and sending it out
12 to be purchased. We need to establish an actual market clearing
13 price to which you can evaluate renewable projects to see which
14 projects really can make it once you do have a real market
15 established. Those that can't would be candidates for your RD&D
16 funding.

17 Okay. A real opportunity for renewables exists in the
18 competition with reliability plants. And I think that any report
19 dealing with the prospect of renewables should address the ability
20 of renewables to compete against existing utility reliability
21 plants.

22 Some of these facilities are very old and are not very
23 efficient. There is a potential that reliability plants can
24 compete effectively for, or that renewable plants can compete
25 effectively with reliability plants, and, thereby, receive that

1 higher price that's going to go to reliability plants. It won't
2 be the market clearing price. And that is a way to allow
3 renewables to survive through the extended subsidy programs that
4 have been established.

5 One short recommendation, too, reenforce Chairman
6 Imbrecht's comment regarding the use of the rest of the staff that
7 you have. We would recommend that you make some use of your
8 siting staff to review the practicality of some of the programs
9 that you're going to get. Because you have limited funds, and it
10 doesn't make any sense to invest in programs that really aren't at
11 a stage where they're going to contribute in the future.

12 In addition, I'm just reenforcing comments from others
13 here in that you ought to also investigate the opportunities for
14 providing additional funding for renewables through air quality
15 offsets or CO2 offsets. That issue's getting larger all the time.
16 And other areas that may also help to also hold up renewables
17 until a real market emerges.

18 I just have a few short comments on RD&D. Would it be
19 best to give those now or?

20 **CHAIRMAN IMBRECHT:** I'd prefer if you could wait.

21 **MS. LUCKHARDT:** Okay. Thank you.

22 **CHAIRMAN IMBRECHT:** Because we're trying to get through
23 the renewable piece. But thank you very much for your comments.

24 Mr. George Hay.

25 **MR. HAY:** I'm George Hay. I work with the Electrical

1 Power Research Institute in the gas turbine areas as well as with
2 the collaborative Advanced Gas Turbine Program in California.

3 What I wanted to address was the question of what is a
4 renewable plant, and particularly the assumption that a renewable
5 plant shouldn't use more than 25 percent gas.

6 A recent conference by EPRI and the Department of Energy
7 in which David Rohy participated, really, which was focused on
8 renewable gas turbines, and questioning the assumption that goes
9 all the way back to PURPA that renewable plants should only be 25
10 percent of an alternative fuel, therefore, limited renewable
11 plants to small steam plant technology.

12 And in the 1980's gas prices dropped, the Fuel Use Act
13 was made a moot point, and gas turbines became the dominant
14 technology in the marketplace. And gas turbines are still
15 undergoing rapid changes in their advancement and the options
16 they're providing. And if renewable plants are limited to 25
17 percent use, you're going to have a lot of very small steam plants
18 which those of us in the technical community know are very very
19 expensive.

20 The issue with the renewable conference, of which the
21 proceedings should be available soon from EPRI and DOE, and
22 there's plans for another workshop, which I believe they would
23 like to involve the Energy Commission, was really what are
24 appropriate definitions for renewable plants and are there
25 alternatives in gas turbine technology, the new paradigm if you

1 will. I've heard "bridge" a lot today. Let's throw in paradigms.

2 But looking at the gas turbine paradigm, it may be that
3 the most cost effective way to bring renewables into the market or
4 salvage renewables is to look at combined cycle concepts where the
5 geothermal or the biomass or the solar thermal is a supplement to
6 the bottoming cycle to make the bottoming cycle big and more cost
7 effective, and the gas turbine is run on natural gas as a cycling
8 unit.

9 And those types of combinations are being exploited in
10 the marketplace. I think you have a model here right in your own
11 backyard with the Sacramento Municipal Utility District. When
12 they added their combined cycle cogen projects, they did it in
13 integrated fashion with biogas in some of the projects, and they
14 did it in an integrated fashion with their wind turbines. And
15 individually those plants don't use a lot of renewable energy, but
16 in aggregate, they brought a lot on line in probably the most cost
17 effective manner that they could. The market driven approach.

18 The World Bank Global Environment Fund is funding in
19 Mexico a 400 megawatt combined cycle project that will have 60
20 percent gas efficiency augmented by an 80-megawatt solar trough
21 bottoming cycle. And the solar portion is a minute point, or it's
22 a small part of that overall project, but it's the most cost
23 effective way to bring solar energy into the market in that
24 circumstance.

25 I think when you look historically at the California

1 market you see the hydro and you see the fossil units. The PG&E,
2 the Edison steam units, and the old paradigm was put a cycling
3 fossil unit in close to the load center, and then connect up all
4 the regional renewable hydro units and have synergies between
5 those gas and renewable resources.

6 I think with the new renewables, the winds, the biomass,
7 the geothermals, those types, the solar thermals, you're dealing
8 with a different type of periodicity and you're dealing with gas
9 turbines. And it may be putting a gas cycling turbine in San
10 Francisco with a wind farm somewhere else may be a project and
11 should be considered a renewable project even if the gas turbine
12 isn't itself renewable. But it's facilitating renewable energy.

13 So the question really is is what is the proper
14 definition for renewable plant. It probably isn't 25 percent in
15 the current market. It might be 20 percent renewable and 80
16 percent gas. I don't know the answer to that. It needs some
17 investigation.

18 I'm involved with some Energy Commission Staff efforts
19 in the R&D group to get some answers on that. But I think it was
20 important to bring out this point at this meeting that
21 fundamentally gas turbines and renewable plants should be looked
22 at a little bit different than the historical viewpoint and maybe
23 turn PURPA upside down.

24 As a last component as relative to the operating
25 renewable units, they're all very good candidates for retrofits

1 with gas turbines. And retrofitting those plants may be a way to
2 salvage that investment and re-optimize them. But fundamentally
3 they're gas projects, but it might salvage the renewable
4 investment. And I think they should be looked favorably upon in
5 this type of legislation where you're trying to get the maximum
6 bang for your buck.

7 So with that I would advise the copy of the EPRI and DOE
8 proceedings to be looked at, some of the results. And if the
9 Energy Commission were participant in the follow on EPRI/DOE
10 workshop, I think EPRI and DOE could be encouraged to have that
11 sooner rather than later if there was an interest.

12 Thank you.

13 **CHAIRMAN IMBRECHT:** Thank you very much. Very helpful.

14 **COMMISSIONER MOORE:** Mr. Chairman.

15 **CHAIRMAN IMBRECHT:** Yes, Commissioner Moore.

16 **COMMISSIONER MOORE:** Just a gentle reminder, and if I'm
17 wrong on this my colleagues will step in and correct me. But to
18 the speakers who are yet to come, I might just remind you that the
19 hearings on all of these items are going to be lengthy, detailed,
20 and depending, of course, on the discretion of the Committee
21 Members who are involved, they may or may not go into many of the
22 arcanities of some of the information that's being presented
23 today.

24 Today's hearing is about process. Today's hearing is
25 not to influence en banc, the entire group of Commissioners, as to

1 a certain point of view or as to a certain set of relationships
2 except where you might provide us with some information as to the
3 links between, for instance, the renewables and RD&D categories
4 that would allow us to conduct better, more efficient, more
5 accurate and more perceptive hearings.

6 So unless I'm wrong, if you could keep your comments
7 focused on the process that we're about to undertake and help us
8 to make that more efficient and uniform, it seems to me your
9 comments will go farther, be received better and probably have
10 more effect on the Commissioners.

11 **CHAIRMAN IMBRECHT:** Very good admonition. I should
12 have offered those comments myself.

13 All right. That is the last of my acknowledged
14 witnesses on the renewable topic. Before we close this part out,
15 let me inquire if anyone else would like to address the
16 Commission.

17 Yes, sir.

18 **MR. BARTOLOMUCCI:** Chairman Imbrecht and Commissioners,
19 Mr. Gamson, I somehow missed the blue cards and part of the
20 problem.

21 **CHAIRMAN IMBRECHT:** Could you identify yourself,
22 please.

23 **MR. BARTOLOMUCCI:** I'm sorry. I'm name is Vince
24 Bartolomucci from San Diego Gas and Electric. I somehow missed
25 the blue cards, but then again since we now have a new yet unnamed

1 company, I wasn't sure what name to put down on the blue card
2 anyway. So I figured I'd just come up and do it this way.

3 [Laughter]

4 **MR. BARTOLOMUCCI:** I don't have a lot of comments. I
5 just wanted to offer our support in this process. And to offer
6 that if there's any way that we can help you over the next several
7 months, we'd be more than willing to do that.

8 I also agree with Commissioner Moore that I think there
9 are some ways to make the process more efficient.

10 One thing I would offer is I think there's the
11 likelihood that at least some people in the room, especially those
12 who were involved in the formation of AB 1890, are likely to want
13 to try to re-litigate issues. I would urge the Commission to have
14 a defined set of what it is that AB 1890 said to do, and then
15 eliminate that discussion and move forward. Because otherwise I'm
16 afraid that most of the time will be spent on arguing what should
17 be done and not how to do it.

18 One particular point that I've heard raised today, at
19 least by a couple of parties was, was the funding level for
20 renewables. I think the legislation was clear. I think there was
21 a floor of 465 and there's a ceiling of 540. For San Diego, we
22 have a floor and a ceiling, and it happens to be the same number
23 because that's what we negotiated in, and it was \$12 million a
24 year or \$60 million over four years.

25 But, again, those are the type of things that I think it

1 would be beneficial for the Commission to address at the front and
2 define and eliminate that process. That's all my comments. Thank
3 you.

4 **CHAIRMAN IMBRECHT:** I agree with you. We heard all
5 sorts of comments today of people advocating that we ignore some
6 of the provisions in the legislation, and I would just suggest the
7 state agencies do that at their own peril.

8 [Laughter]

9 **CHAIRMAN IMBRECHT:** All right. Anyone else?
10 Yes, ma'am.

11 **MS. BONE:** Chairman Imbrecht, my name is Traci Bone.

12 **CHAIRMAN IMBRECHT:** Please come up to the microphone.

13 **MS. BONE:** Sorry. Chairman Imbrecht, Commissioners and
14 Mr. Gamson, my name is Traci Bone, and I'm here on behalf of Texas
15 Ohio Energy. I did submit a blue card, but it somehow got into
16 one of your other piles.

17 But I'll just say, to keep comments short --

18 **CHAIRMAN IMBRECHT:** Texas Ohio Energy. Go ahead,
19 please.

20 **MS. BONE:** Okay. I've submitted written comments, and
21 instead of reiterating them here, if anybody wants a copy, they
22 can come see me for them. And I'll make sure that you get some,
23 too.

24 Thank you.

25 **CHAIRMAN IMBRECHT:** And you're planning to compete out

1 here in California now?

2 **MS. BONE:** I beg your pardon?

3 **CHAIRMAN IMBRECHT:** You're planning to compete in
4 California?

5 **MS. BONE:** Oh, absolutely. I'm sorry, Texas Ohio
6 Energy is a California based corporation.

7 [Laughter]

8 **CHAIRMAN IMBRECHT:** I give up.

9 **MS. BONE:** And with your assistance, we will be
10 competing in California very soon.

11 **CHAIRMAN IMBRECHT:** There is a comparable situation.
12 The California Energy Company is now headquartered in Omaha,
13 Nebraska.

14 Okay. Any further comments?

15 Well, we thank you all very much.

16 And Ms. Deller, Mr. Masri, you're excused. And we'll
17 move on to the irrigation district portion of the hearing.

18 Mr. Rhoads, would you like to introduce your staff on
19 that issue.

20 **MR. RHOADS:** I will introduce them as soon as I see
21 them.

22 **CHAIRMAN IMBRECHT:** They're right behind you.

23 **MR. RHOADS:** Dan Nix and Linda Kelly. Linda Kelly is
24 the Project Manager, and Dan Nix is the Division Chief in charge
25 of the Forecasting Division. And I'll turn it over to Dan Nix.

1 **CHAIRMAN IMBRECHT:** I should also say just before we
2 get started on irrigation that we will rely heavily upon
3 Commissioner Rohy for his input on combined cycle gas turbines.
4 You're the expert in that regard.

5 All right, Mr. Nix.

6 **MR. NIX:** Thank you. For those in Internet land, my
7 name is Daniel Nix. I'm the Deputy Director for Energy
8 Forecasting and Resource Assessment with the California Energy
9 Commission.

10 I have the important task of introducing one of my staff
11 sitting to my right, Linda Kelly, who will actually be doing the
12 bulk of the work as the Commission goes through the process of
13 allocating 110 megawatts of exemption from, if not all, a portion
14 of the competition transition charge.

15 One hundred and ten megawatts may seem small in the
16 light of the 55,000-megawatt electric system that supplies
17 California, but we've already seen a high degree of interest
18 expressed by parties interested in obtaining a portion of the 110
19 megawatts. So I think the Commission should be prepared for an
20 eventful process in this regard.

21 With that, I will now turn it over to Linda Kelly.

22 **MS. KELLY:** Thank you. I'll just briefly review what
23 the 110 megawatts is, and just very briefly and go into what Staff
24 is planning to do.

25 The Public Utility Commission Code Section 374 states

1 that 110 megawatts of certain load newly served by irrigation
2 districts load which would otherwise be served by investor owned
3 utilities will be exempt from paying any uneconomic costs
4 associated with the movement of the state's long-time system of
5 electric power monopolies to a free and competitive market.

6 The first step in this process requires that the Energy
7 Commission allocate a 110-megawatt exemption. This is specified
8 in the law. I'm sorry. Among the service territories of PG&E,
9 Edison, San Diego. In a ratio the number of eligible irrigation
10 districts in the service territory of each utility to the total
11 number of eligible irrigation districts in the three service
12 territories. These allocations will be phased in over five years,
13 one-fifth of the megawatts at a time.

14 In order to receive an exemption, eligible irrigation
15 districts must file a detailed plan with the Energy Commission no
16 later than January 31, 1997, that shows the load it serves or
17 plans to serve and for which it seeks the exemption should be
18 specified in those applications. These loads should not be less
19 than eight megawatts, and they should be no more than 40
20 megawatts.

21 After plans are filed, the proposed procedures that are
22 spelled out in today's hearing order call for hearings and a final
23 committee decision roughly around early June.

24 Realizing the importance of timeliness, the Energy
25 Commission has already taken action to implement this section of

1 the Public Utilities Commission code, and on October 1 a letter
2 from Chairman Imbrecht was sent to all irrigation districts
3 informing them of the 110 megawatt exemption that was available
4 and the responsibilities of California Energy Commission.

5 Staff has also undertaken an extensive effort to contact
6 numerous irrigation districts and stakeholders for the purpose of
7 identifying issues early in this process concerning both
8 procedures and the plans that the irrigation districts will
9 ultimately submit here to the Commission.

10 Staff has also completed an initial allocation of the
11 110 megawatts as directed by the statute. And this is available
12 right now. And if anybody would like to look at it, we'd be glad
13 to send it to them for their comments and for discussion.

14 Just as a point of interest, the 110 roughly splits out
15 to between 70, depending on how this ends up to be, between 70, 75
16 percent for PG&E. So the largest part of the irrigation districts
17 are in the PG&E area. Edison has around 20 some odd percent. And
18 there's three irrigation districts we've identified in San Diego's
19 territory.

20 The issues that we identified and that are also in the
21 order I'll just briefly go over for anybody who hasn't seen it.
22 The initial allocation of the 110 megawatts among the three
23 service territories needs to be resolved. The definition of
24 irrigation district boundaries, the method in which megawatts to
25 be allocated among loads should be computed, the definition of

1 load that is used to power pumps for agricultural purposes needs
2 to be defined. Should all allocations be made at one time by this
3 Energy Commission, what information should be included in the
4 applications and what criteria should the Commission use to make
5 these allocations.

6 This list reflects the major issues that Staff has
7 identified in the course of conversations since the statute was
8 passed, but Staff anticipates other comments from other people
9 will be raised possibly in this workshop and other proceedings
10 that we have.

11 Staff is ready to work with the assigned committee and
12 move forward immediately. We feel consensus building in informal
13 workshops before going to any evidentiary proceedings will best
14 facilitate moving this process along quickly.

15 We look forward to working with all parties to help
16 facilitate the implementation of Section 374 in a timely manner.
17 Thank you.

18 **VICE CHAIR RAKOW:** Thank you very much.

19 We have various irrigation districts and other people
20 who wish to comment. The first person Robert Mount. Is he here?

21 Thank you, Mr. Mount.

22 **MR. MOUNT:** My name is Bob Mount. I'm the General
23 Manager for Fresno Irrigation District. I'd like to address the
24 proposed schedule for Commission action on allocation of the
25 exemption credits.

1 As you well know, the new regulation process has created
2 a great deal of uncertainty for irrigation districts as far as
3 their ability to provide low cost power to their constituents. We
4 had had that power before the deregulation process started, and
5 things have been pretty much up in the air. The AB 1890
6 legislation clearly intended to end this uncertainty and did so
7 with the allocation of those credits.

8 I urge the Commission to adjust its schedule. Currently
9 you call for some sort of decision on June, but I urge you adjust
10 that schedule to allocate those exemptions as quickly as possible
11 to end this uncertainty.

12 Thank you.

13 **CHAIRMAN IMBRECHT:** All right. Thank you very much.

14 Next Traci Bone.

15 **MS. BONE:** And now I'm regretting having my opportunity
16 to talk about renewables. But again, my name is Traci Bone, and
17 this time I'm here on behalf of my law firm Davis Wright Tremaine.

18 Chairman Imbrecht, Commissioners, Mr. Gamson, the one
19 procedural comment that we would like to make at this time is that
20 in developing rules with regard to irrigation districts and the
21 allocation of CTC exemption that is given to them, that the
22 Commission keep in mind the large number of small irrigation
23 districts, and that rules be designed that would allow them to
24 also participate in this process.

25 It is my understanding at this time that many of these

1 smaller irrigation districts would have a difficult time meeting
2 the 50 percent ag pumping requirement. And if the Commission
3 could come up with a mechanism which would accommodate their
4 needs, that would be greatly appreciated.

5 Thank you.

6 **CHAIRMAN IMBRECHT:** Okay. I have to ask, I glanced
7 through your previous statements, how did the Texas Ohio Energy
8 Company end up in California? Or you know the history?

9 **MS. BONE:** They have a California office here, and they
10 were originally a gas company. And that's where the Texas Ohio
11 comes from, buying a lot of their gas from that area. And they've
12 just now applied that name here in California to start marketing
13 their new product which is the voc gen. It's a machine that
14 they've trademarked that's produced by Allied Signal.

15 And what the voc gen does is it burns VOC emissions as
16 fuel as a form of cogeneration to help facilities such as bakeries
17 eliminate VOCs as required under the Clean Air Act.

18 **CHAIRMAN IMBRECHT:** Thank you.

19 **MS. BONE:** You're welcome.

20 **CHAIRMAN IMBRECHT:** All right. Michael Boccadoro.

21 **MR. BOCCADORO:** Michael Boccadoro with the Ag Energy
22 Consumers Association. Spelled B, as in boy, o-c-c-a-d-o-r-o.

23 I'll keep my verbal comments very brief today and focus
24 mostly on the process. I was concerned as I read through PG&E's
25 formal written comments today that they're attempting to put some

1 new issues on the table that I don't think your staff identified.

2 I think your staff did an admirable job of identifying
3 the issues that do need to be resolved quickly so that we can meet
4 the January 31 deadline for the irrigation districts to submit
5 proposals.

6 As a way of background let me tell you that the AECA was
7 the primary proponent of Section 374 in the legislative process
8 along with the Modesto Irrigation District and the Merced
9 Irrigation District. We were also the primary drafters of that
10 section and have spent some time talking with your staff as to
11 what issues we see that need to be resolved.

12 As way of the process, I would like to reiterate the
13 point that Mr. Mount made from Fresno Irrigation District. We
14 have a very short transition period here. Section 374 provides a
15 five-year transition. Very important transition for irrigation
16 districts during the transition in the electric restructuring.

17 And if you follow the course that was set out in your
18 Notice of En Banc Hearing of not allocating the megawatts until
19 June, what you're going to effectively do, since the legislation
20 requires that these irrigation districts, for the most part, build
21 new distribution systems to serve their new customers, you're
22 going to effectively preclude any allocation or use of the
23 allocation in year one of this transition. Since it's only a
24 five-year transition, you've effectively cut off 20 percent of
25 that allocation. And so I would like to recommend, as Mr. Mount

1 did, that you rethink the allocation process.

2 We've given the districts a very short amount of time
3 with the January 31 deadline. We recognize that when we wrote
4 that into the legislation, but we did that for a very distinct
5 purpose, and that was to get this process rolling quickly. And we
6 are hopeful that the Commission will rethink their strategy in
7 terms of allocating those megawatts no later than February, the
8 end of February, so that we can get moving very quickly with those
9 districts who are awarded an allocation. That they can then build
10 their distribution systems to begin serving their customers early
11 in 1996.

12 Thank you very much.

13 **CHAIRMAN IMBRECHT:** Have you had the chance to review
14 the reference that Ms. Kelly made to initial allocations?

15 **MR. BOCCADORO:** Yes, I have. At lunch today I saw it
16 for the first time. It tends to flow very consistently with what
17 we discussed during the legislative process. It's a little lower
18 in PG&E service territory, but I think the districts that she's
19 identified are very accurate. And so I think the allocation's
20 very very on point.

21 **CHAIRMAN IMBRECHT:** Well, I think we are trying to move
22 expeditiously, and if you would play off of that process, we'd
23 appreciate it.

24 **MR. BOCCADORO:** Thank you.

25 **CHAIRMAN IMBRECHT:** Okay. Thank you.

1 Chris Mayer.

2 **MR. MAYER:** Chairman Imbrecht and Members of the
3 Commission, my name is Chris Mayer. It's spelled M-a-y-e-r. I'm
4 Assistant General Manager of the Modesto Irrigation District.

5 We thank you for the opportunity to speak today. We
6 plan to put in more detailed comments in the workshop process and
7 the hearing process, and we look forward to working with the
8 committee of Commissioners Rohy and Sharpless in that process.

9 A couple of procedural issues for us, as Michael
10 Boccadoro stated we participated in the legislative process that
11 led to the irrigation district exemption as part of an overall
12 compromise. And the compromise that included this exemption
13 really led to our agency supporting Assembly Bill 1890. So we
14 feel it's a very very important compromise, and that the benefits
15 of the compromise not be diminished in the process.

16 We also felt very strongly that the California Energy
17 Commission should be the arbiter in the allocation process. We
18 think the expertise and experience is here to make the allocation
19 fairly. And we think the bill was very clear that CEC has the
20 full and exclusive jurisdiction on this matter.

21 With regard to the application process, my district,
22 Modesto Irrigation District, believes that we have all the
23 necessary facilities and resources to meet the criteria of the
24 program. And, in fact, we also have a unique service area
25 agreement with PG&E that does not restrict MID from providing

1 electric service anywhere within PG&E's electric service area.

2 And I think that's the reason for the somewhat
3 interesting provision of the bill that says the exemptions can be
4 applied either within the irrigation district boundaries or
5 anywhere within Stanislaus or San Joaquin County. We want to make
6 sure that that important part of the legislation is remembered as
7 part of this process.

8 In terms of the procedures that were suggested in the
9 Notice, we find them to be largely acceptable. We also would like
10 to see the process be as informal as possible. Perhaps allowing
11 the irrigation districts, if they are able to, to help in the
12 allocation process. Maybe even constructing an allocation among
13 themselves with the facilitation of your staff.

14 We also encourage quick action for the exact issue that
15 was identified by the previous two speakers. The exemption is a
16 five-year exemption. It's effective really January 1 of next
17 year. And to the extent that the decisions were made as close to
18 the application date as possible, it would really help the
19 customers that are, you know, basically in some cases frozen in
20 some of their decisions about competitive electric services
21 suppliers waiting on the outcome of the CTC allocation.

22 In fact, we're actually servicing a number of customers
23 now and have been for most of this year that would be potential
24 beneficiaries of an exemption. So those folks who have switched
25 from PG&E to MID would also be very interested in seeing a

1 relatively quick conclusion of this process.

2 By and large, we think, you know, look forward to the
3 competitive aspects. We've had a little experience now in local
4 competition. We think it's healthy. It solves a lot of the
5 problems that have been difficult to address through the
6 regulatory process. Even some of the issues associated with
7 reliability and customer service really shape up when there's
8 head-to-head competition in electric utility providers.

9 So we think the exemption goes a long way towards
10 keeping that concept alive and look forward to participating in
11 the Commission's process.

12 Thank you.

13 **CHAIRMAN IMBRECHT:** Thank you very much. Questions?
14 William Manheim.

15 **MR. MANHEIM:** Thank you. I'm Bill Manheim from PG&E.

16 And we intend to be an active participant in this
17 proceeding as you've heard from PG&E throughout the day. Although
18 I think that we'll be a little unique in that we may be the most
19 active participant who isn't going to be wrangling for an
20 allocation.

21 Our interest is primarily in implementation. We
22 recognize that there are lots of decisions to make about which
23 irrigation districts will get the exemptions and how the 110
24 megawatts will be shared. Our concern is looking forward a bit,
25 wondering once an award of a megawatt is provided to an irrigation

1 district, how that megawatt can be used and how it can be applied
2 to customers.

3 There are a number of these types of implementation
4 issues that we think it's important to identify early in the
5 process and hopefully seek some resolution from this Commission as
6 soon as possible.

7 The applications that will be filed by the irrigation
8 districts on January 1 are required to be very detailed, but if we
9 don't know what a megawatt is or how a megawatt's going to be
10 measured or how a megawatt of an award can be applied to load,
11 it's going to be very difficult for those irrigation districts to
12 draft their applications.

13 So we believe there are a few threshold issues which
14 we've identified in the attachment to our comments that we hope to
15 bring before this Commission for some threshold decisions early
16 on.

17 There are, as a general matter, we believe Staff's
18 outreach efforts have been excellent. Appendix A identifies
19 primarily all of the issues that we believe need to be addressed
20 before this Commission. We did suggest two other issues that I
21 think are related to issues on the Appendix. But if I could touch
22 on those briefly.

23 One issue is that the exemptions for the irrigation
24 districts are temporary and not complete exemptions. They're
25 exemptions for CTC, but they begin in 1997 and they end in 2001,

1 and they are phased in over time. So there will continue to be a
2 CTC charge that applies after 2001. It's been referred to as "the
3 tail" for those that participated in 1890.

4 And there will continue to be non-bypassable charges for
5 nuclear decommissioning and public purpose programs. And those
6 charges will apply even to exempt CTC customers that would be
7 served by these irrigation districts.

8 That's in AB 1890. It's fairly clear on what's the
9 Commission's, why should this issue come before the Commission.
10 We think that there are some consumer protection issues involved
11 here. We want to make sure that customers who will be served
12 under these exemptions are aware that there will continue to be
13 other non-bypassable charges applicable to them as well as CTC
14 charges that will kick in in 2001.

15 There are also enforcement requirements in AB 1890. It
16 specifies that before an irrigation district serves the customer,
17 an IOU customer, it needs to, one, notify that customer about CTC
18 applicability as well as obtain some type of written assurance
19 from those customers. So we just want to ensure that the
20 Commission enforces those provisions of the act.

21 Our other concern again concerns how you use a megawatt
22 once you've been awarded one. Our view is that a megawatt
23 allocation should be applied on a customer basis, not a portfolio
24 basis. So if you have, if Modesto Irrigation District wishes to
25 serve eight megawatts of customers and their 8 one-megawatt

1 customers is targeted, then one megawatt of its exemption would be
2 applied to each of the eight.

3 Our concern is that if Modesto wanted to serve 16
4 one-megawatt customers -- and I'm sorry, I don't mean to single
5 out Modesto. If an irrigation district chose to do that, it would
6 try to share those allocations among the 16 customers such that
7 each customer would see a reduction in their CTC rate but not a
8 complete exemption.

9 We think there are lots of variations about how these
10 megawatts can be used. That's just one example. And we hope that
11 in the workshops we can explore some of these, reach consensus if
12 possible; but if it's not possible, bring them to the Commission
13 for a decision before January 1. Because we think it's vital that
14 we know what a megawatt is before applications are submitted.

15 Thank you very much.

16 **CHAIRMAN IMBRECHT:** Okay. Thank you very much.

17 Mr. Jeff Meith.

18 **MR. MEITH:** Thank you. Good afternoon. That's
19 pronounced Meith, by the way. Well, it should be, it should be
20 Meith.

21 **CHAIRMAN IMBRECHT:** I give up. I've come close on a
22 lot of these, but I haven't hit too many right, have I?

23 **MR. MEITH:** Your German is correct, Mr. Chairman. It
24 should be Meith, but somehow way back in my before my time it was
25 changed around. But it's pronounced Meith, M-e-i-t-h.

1 I'm appearing today on behalf of Oakdale Irrigation
2 District which is composed of around 72,000 acres in eastern
3 Stanislaus and San Joaquin County, sort of bridging over the
4 Stanislaus River. And we have received a copy of the Notice, and
5 in light of Mr. Moore's admonition we just want to note one point
6 that we think has to be included as an issue for discussion. And
7 it's a fairly localized issue, and it is the interpretation of 374
8 LAF, particularly the provision that states that the allocation
9 procedures of your Commission will apply to, I believe it says, to
10 any load served by any irrigation district in Stanislaus and San
11 Joaquin Counties.

12 There are those who I think quite reasonably argue, and
13 it would certainly affect Oakdale's application which it intends
14 to make, that that particular provision addresses directly the
15 so-called split between agricultural and other types, agricultural
16 pumping, excuse me, and other types of load. And that will need
17 to be clarified, obviously, because it can have a big effect on
18 Oakdale.

19 For the Commission's information, Oakdale's been in the
20 wholesale power business since about '54 and still is, but it
21 intends to get into the retail power business in light of the
22 ongoing activities, and, therefore, we're going to be an active
23 participant. But we do think that issue has to be included, and
24 we intend to participate.

25 I might add in terms of procedures that's certainly an

1 issue that I think avails itself at least initially to informal
2 discussion. We're only talking two counties and a limited number
3 of irrigation districts and only PG&E on the utility side. So
4 hopefully it may be that we could sit in the same room and decide
5 we have the same interpretation of that language. But certainly
6 an informal workshop-type session may be helpful on that bi-county
7 issue.

8 Thank you very much.

9 **CHAIRMAN IMBRECHT:** All right. Thank you.

10 That again concludes my witness list. Does anyone else
11 wish to be heard on the issue of irrigation districts?

12 Mr. Johnson.

13 **MR. JOHNSON:** I, too, will be quite brief and echo
14 PG&E's point that we will not be here for allocations as part of
15 the process. In fact we have probably, even at that, very small
16 amount of allocation.

17 We did submit comments in detail for the Committee to
18 review on the particular issues which I think will expedite the
19 process. We plan to participate, and we look forward to doing
20 that. And hopefully we can resolve that.

21 We, too, share an interest in trying to get the
22 allocations tightened up so that the January 31 date can be met.
23 We think that's an important issue, too. Thank you.

24 **CHAIRMAN IMBRECHT:** Thank you.

25 Anyone else wish to be heard?

1 I take this opportunity to correct an omission. I
2 should have earlier introduced a former member of the Energy
3 Commission, Mr. Robert Mussiter. Glad to see you, Bob.

4 **MR. MUSSITER:** Glad you noticed.

5 **CHAIRMAN IMBRECHT:** Yes, I've seen you hovering back
6 there.

7 **MR. MUSSITER:** Is this ER7?

8 [Laughter]

9 **CHAIRMAN IMBRECHT:** Actually you should know that this
10 spectacular photograph of the lightning bolts is on a
11 semi-permanent loan from Commissioner Mussiter to remind us of
12 where energy really comes from.

13 All right. Moving right along. Mr. Rhoads. Let's turn
14 on to RD&D.

15 Thank you, Dan and Linda.

16 **MR. RHOADS:** I'll turn the microphone over to Mike
17 DeAngelis.

18 **MR. DeANGELIS:** Commissioners, I'm very pleased to
19 provide some introductory Staff comments on public interest RD&D
20 and AB 1890 today.

21 It's really with much relief that finally after over two
22 years of following this issue of decline of both regulated and
23 public interest RD&D in the State of California, that finally I
24 think we're seeing the light at the end of the tunnel. I don't
25 think we're all the way through that tunnel yet. We have a ways

1 to go, but we're certainly getting close.

2 I thought that what I would comment on today is really
3 the very strong foundation that we have to begin a public interest
4 RD&D program in the State of California. And that primarily
5 exists with the substantial work that has been done
6 collaboratively with stakeholders in developing a working group
7 report to the California Public Utilities Commission which was
8 submitted on September 6 to the CPUC.

9 So I wanted to comment a bit about that because it lays
10 the foundation from where we go here, part of the foundation, and
11 I also wanted to comment a bit about what AB 1890 says.

12 In terms of the RD&D working group for the Public
13 Utilities Commission, we had a very broad group of
14 representatives. All of our IOUs were represented. Municipal
15 utilities were represented as were our R&D institutions through
16 the University of California, the Electric Power Research
17 Institute. Ratepayer advocates were represented on the working
18 group, as were environmental interests through the Union of
19 Concerned Scientists, and also the Natural Resources Defense
20 Council.

21 The RD&D working group worked very very effectively,
22 worked collaboratively. We did not dodge issues. We covered some
23 of the primary issues on public interests and other RD&D in line
24 with what the PUC requested that working group to do. Worked very
25 very effectively, and I think that group, not only in the work

1 they did to the PUC but also in the future, will be extremely
2 helpful in clarifying what public interests RD&D should be done in
3 the State of California in the future.

4 The tasks that were provided by the Public Utilities
5 Commission for the RD&D working group were really three. One was
6 to define boundaries between competitive, regulated and public
7 goods RD&D.

8 The second task was to explore public goods RD&D
9 funding.

10 And the third task was really to explore how those funds
11 be administered through the independent non-utility entity.

12 The first area of work on RD&D boundaries the working
13 group decided very clearly that there should not be bright line
14 definitions. That that was inappropriate. That it would actually
15 suppress innovation which is so important to try to stimulate
16 through the RD&D process. That instead there should be broad
17 overlapping definitions because it supported creativity and
18 collaboration important to the RD&D process.

19 We defined competitive RD&D as developing science or
20 technology benefits which can be appropriated by the private
21 sector entity making the investment. "Appropriated" being a key
22 term here.

23 Examples would be near term efficiency improvements to
24 power plants. New technologies to lower O&M expenses in a power
25 plant would be another example.

1 The second definition for the RD&D boundaries task was
2 for regulated R&D. And the definition in the working group report
3 was to develop science or technology benefits which relate to
4 regulated functions of the entity making the investments.

5 This broad definition really applies to our regulated
6 IOUs after restructuring and where they have their monopoly has
7 shrunk down to. And, in fact, an example cited in the report is
8 RD&D on new technologies for the transmission distribution system,
9 or really anything directed by the PUC, such as the LEV R&D
10 programs directed by the PUC.

11 The third definition that we were asked to provide to
12 the RD&D working group was on public interest RD&D. And the
13 definition we provided was to develop science or technology. One,
14 the benefits which accrue to Californians. And two, that is not
15 adequately addressed by competitive or regulated entities. And
16 that's the definition we provided there.

17 And the public, of course, means California citizens.

18 And examples of public interest RD&D would be new
19 technologies to improve environmental quality over and above
20 existing regulations. New technologies improving public health
21 and safety of different energy technologies and others could be
22 examples of public interest RD&D.

23 In terms of RD&D funding issues, the second task given
24 to the RD&D working group by the PUC, I'll keep my comments fairly
25 brief in this area, but the RD&D working group did coalesce and

1 agree upon a focus of public interest RD&D. And that focus that
2 was agreed to by stakeholders was a focus on energy efficiency,
3 renewables and environmental issues.

4 Now, that was a focus, not everything needs to be in
5 that area, but that's a focus of the organization upon which we
6 can build on here in the future for our California program based
7 on AB 1890.

8 There are also a variety of funding options that were
9 proposed. And there were really four options. I won't go into
10 these in detail, but they ranged in funding from \$20 million up to
11 \$225 million. And all of the stakeholders really were in one of
12 these four funding categories.

13 There was a substantial discussion on where
14 commercialization fit, vis-a-vis RD&D. And, in fact, the working
15 group decided to define RD&D as not including commercialization,
16 as instead advancing science or technology. But the working group
17 also agreed that commercialization was very very important. And,
18 in fact, it certainly does no good to do RD&D that is not
19 commercialized in the marketplace.

20 So what was done in terms of these four funding options
21 there was also proposed add-on funding to address the
22 commercialization issues for three out of those four funding
23 options. It was also decided that the RD&D administrator could
24 do limited scale or lower cost commercialization also.

25 In terms of the RD&D independent administrator and how

1 we explored that for the Public Utilities Commission, one of the
2 first things we wanted to do was lay out a foundation for that
3 administrator. And so what the working group report developed was
4 a series of goals for the RD&D administrator. And I'll just
5 quickly run through those. And we also developed functions and
6 criteria which I'll run through, too.

7 But the goals are to serve the public interests, public
8 benefits.

9 **CHAIRMAN IMBRECHT:** Run quickly.

10 **MR. DeANGELIS:** I will. I will. Serve the public
11 interest, support state energy policy, address consumers' needs.
12 Those were the primary goals of public interest RD&D.

13 Terms of functions, it would really function in terms
14 related to policy making, planning, conducting RD&D and the
15 administration of the actual RD&D program.

16 And in terms of criteria for measuring success of the
17 organization, several things came out and were described. Number
18 one, an open and flexible planning process where a broad group of
19 stakeholders had input to decisions and input to the plans that
20 were developed by public interest RD&D. Effective and efficient
21 programs, low overhead, balance between near term and long term is
22 all included by that criterion. Public accountability, oversight
23 is important, tracking of projects and understanding the benefits
24 of those projects. And, also, collaboration and enhancing the
25 RD&D infrastructure in the State of California as another

1 performance criterion for the independent administrator.

2 Let me just quickly move on from the RD&D working group
3 to AB 1890 to mention what has laid out in AB 1890. And it
4 specifically says it provides \$62 1/2 million in annual funding
5 for a four-year period for public interest RD&D. It also defines
6 public interest RD&D. And it defines it in a very similar way as
7 the working group report. As advancing science or technology not
8 adequately provided by regulated or competitive interests.

9 It also states that the CPUC will determine the use of
10 the funds, provided only funds for T&D functions remained with
11 investor owned utilities, and that remaining funds go to the CEC
12 subject to administrative and expenditure criteria by the
13 Legislature.

14 I see three issues and potentially more here. One issue
15 is that there will be a very strong need to work closely with the
16 CPUC and stakeholders on public interest RD&D. Particularly
17 regarding the \$62 1/2 million split that's in the legislation.

18 A second issue is to work closely with the Legislature
19 and other stakeholders on the administrative and expenditure
20 criteria that's laid out in AB 1890.

21 And a third issue is to really develop with stakeholders
22 a clear vision or road map on public interest RD&D. And we need
23 to get, clearly get the biggest bang for the dollars that's
24 provided towards public interest RD&D, and there is a process we
25 believe that needs to be done to lay that out in a clear fashion.

1 Now Ron Kukulka has done some thinking particularly
2 about that planning process, so I'll turn it over to Ron for just
3 a couple of minutes.

4 **MR. KUKULKA:** As one of the first steps of developing a
5 process, the Staff proposes that we develop a public interest RD&D
6 implementation plan through a stakeholder collaboration process.
7 We would conduct a series of workshops.

8 **CHAIRMAN IMBRECHT:** Could you pull your microphone a
9 little closer.

10 **MR. KUKULKA:** We would conduct a series of workshops to
11 have stakeholders assist us in working out the details of that
12 plan, and we'd want to tap the expertise of the state's R&D
13 experts to do that on the R&D community. This effort would build,
14 as Mike said, on the working group plan and working group report.

15 The stakeholders would include a broad spectrum of
16 participants, including the investor owned utilities, the munis,
17 university R&D community, EPRI and other R&D organizations,
18 environmentalists and commercial industrial organizations as well
19 as other state agencies.

20 Some of the key elements of the plan we want to develop
21 clear goals and objectives to define what we want to achieve. We
22 want to develop specific R&D programs. We may want to target or
23 identify technology types end use sectors, R&D sectors. We'd want
24 to define the eligibility of technologies, types of projects and
25 applicants, funding mechanisms. We'd look at grants, loans and

1 royalty arrangements.

2 And finally what we'd like to have is an evaluation
3 process that analyzes the project and program benefits to provide
4 feedback and the measurable results of the program so that we can
5 identify what we've done, what the benefits of the program are.

6 Another step in the process is the streamlining of the
7 contracting procedures that the state has. Many of our project
8 participants feel that our contracting process is cumbersome and
9 time consuming. And our Administrative Services Division is
10 leading an effort to reduce that red tape, and this is going to be
11 a key activity in ensuring a successful R&D program.

12 Our tentative schedule, we're looking at having
13 stakeholder workshops from November to about May of next year. A
14 plan coming before the Energy Commission in around June. And then
15 a solicitation and selection process in the July/December time
16 frame with contract awards and grants happening about January in
17 '98 when the funds become available.

18 **CHAIRMAN IMBRECHT:** Okay. Questions?

19 Thank you both very much.

20 Now I'll reintroduce Marv Lieberman representing EPRI.

21 **MR. LIEBERMAN:** Thank you, Mr. Chairman. My name is
22 Marvin Lieberman. I'm with the Electric Power Research Institute
23 and Senior Counsel Regulatory Relations.

24 I have with me, and I want to introduce Al Pack
25 [phonetic], also Senior Counsel Regulatory Relations at EPRI.

1 He'll be involved in the process. He's also here to demonstrate
2 that you don't need white hair to be Senior Counsel, and I hope
3 Carl Blumstein will agree with me about that.

4 I do want to compliment the Commission for proceeding
5 very rapidly on the implementation of the AB 1890 and echoing
6 something Commissioner Moore indicated that I think the emphasis
7 at this point has to be on the process. It's extremely important
8 to get the procedure right at the beginning.

9 The late Justice Felix Frankfort [phonetic] who used to
10 be criticized for his opinions because he put so much weight on
11 the procedure, and he answered his critics by saying from
12 procedure comes substance. And I think that is particularly true
13 in the implementation of 1890, that you'll more quickly get to the
14 resolution of the issues that are listed in the appendix if you,
15 right up front, get the procedure for getting there correct.

16 And in that connection and in wanting to keep my remarks
17 as brief as possible, I think there should be two more issues
18 added to that list. I think from some of the comments the
19 Commissioner and the Chairman has made today they're implied in
20 that, but I just want to make it explicit. And that is the issue
21 of utilizing the present infrastructure and resources in the State
22 of California.

23 The State of California is blessed with educational
24 institutions that are valuable research organizations. And I say
25 this as a matter of pride that the organization I represent is

1 probably nationally and internationally the premier electrical
2 collaborative research arm that exists. And we all have these
3 resources available to the Commission.

4 I'm only speaking for EPRI, but I'm sure the
5 universities would echo this that whatever resources they have
6 they're also available to the Commission. And we would urge the
7 Commission in setting the procedure and looking at the process,
8 and particularly the end game of how do you get the research
9 accomplished as quickly as possible and into the public domain as
10 quickly as possible, that you look at what exists today that you
11 can utilize that will more efficiently and cost effectively
12 achieve that goal.

13 The other issue that I think belongs is how do you
14 maximize this R&D fund. And I suggest that there are two ways of
15 doing it. First through leveraging.

16 For example, we take funds from all over the United
17 States, and because of that we are able to leverage projects.
18 Such an organization as EPRI, for example, where the California
19 fund may not be sufficient for a particular project or may need
20 some additional incentive, the leveraging effect of funds from
21 other organizations combined with the R&D fund created in
22 California may be able to put projects into the marketplace where
23 they might not have been otherwise.

24 The other is co-funding. And I think that the issue of
25 co-funding ought to be considered. The value of co-funding,

1 besides maximizing the dollars, the value of co-funding gives the
2 parties to the projects a sense of ownership and commitment that
3 may not exist otherwise. When you have some of your own money at
4 stake, it tends to grab your interest a little more than if it's
5 just all somebody else's money.

6 So with those just two, those brief comments and those
7 additional issues, I will bring my remarks to a close except to
8 say that for over 20 years EPRI has developed the expertise, has a
9 world of knowledge in public interest R&D. It's available to the
10 Commission. We want to work with the Commission. We can assure
11 you, like we did with the working group R&D process, Mike and I've
12 been working at this for some time for now, we will continue to
13 work with the Commission. We all want the same goal, and that's
14 to bring value in public interest R&D to the citizens of
15 California just as quickly as possible.

16 Thank you.

17 **CHAIRMAN IMBRECHT:** Marv, thank you very much.

18 I just want to reiterate since we expanded our R&D
19 programs now about 11 years ago, it has been fundamental to our
20 approach to pursue precisely the kind of co-funding and leveraging
21 that you referenced. It's been a hallmark of all of our programs.

22 We typically enjoy a three or four-to-one match with
23 other participants. So I think you'll find a very receptive
24 audience on those questions as well.

25 Okay. Richard Kelley.

1 **MR. KELLEY:** Thank you, Mr. Chairman.

2 I was going to reserve my comments for workshop, but
3 since cost sharing and co-funding has specifically been mentioned
4 and that was one of the issues I was going to raise, I'd like to
5 put in a pitch for the little guy.

6 Our company, United Solar Technologies, has recently
7 doubled its workforce to a maximum of four people, and so,
8 therefore, we fall in the very low end of the power curve
9 sometimes. I had hope to step forward and just urge upon the
10 Commission to look kindly upon some of the peculiar problems that
11 we experience in dealing with some contracts.

12 Cost sharing, for instance, means to larger companies to
13 set aside capital to cost share a project. On our level it means
14 that the owner and the other members of the company work nights
15 and weekends because the only cost share that they can put forward
16 on many occasions is their own work hours.

17 So to the extent that there can be some consideration in
18 the days ahead, I know that there's a great deal of work that must
19 be performed by the Commission, and I certainly acknowledge that
20 and wish you the best of luck; but if in these considerations you
21 could give some special consideration for the small companies that
22 will be coming forward to involve themselves in this process, it
23 would be most appreciated.

24 I would say in our defense that when we began as a small
25 company of two people, we started with a single idea and took that

1 idea to the California Energy Commission and to the Department of
2 Corrections, and our two-person company combined with another
3 two-person company, and we built a 28,800 square foot solar
4 collection facility at Tahachapi Prison. That was done by two
5 very very small companies.

6 I have recently completed my first ETAP project, which
7 I'm very grateful to the Commission for, but we found it was
8 difficult in many instances meeting some of the requirements there
9 because we just aren't set up for that.

10 I'm thoroughly in favor of the MBE/WBE/DVBE process, but
11 for R&D it can become very difficult for a very small company to
12 try and accomplish its limited goals on limited capital and still
13 comply with some of those processes. So I guess I'm basically
14 from a process standpoint standing forward and saying as you
15 deliberate these processes try to give some consideration to those
16 of us who are on limited budgets and have as our capital the sweat
17 of our brow and good intentions.

18 And we certainly look forward to competing for these
19 resources. This is a wonderful opportunity for all of us. And
20 we're ready.

21 **CHAIRMAN IMBRECHT:** What type of solar technology do
22 you employ?

23 **MR. KELLEY:** We have just completed building a solar
24 thermal cogenerating concentrator. It's a PV thermal
25 concentrator. We used the Boeing cells that were developed under

1 the Star Wars Program. That's a galley marsonite [phonetic] cell,
2 and it is strange, isn't it? There was a fire sale at Boeing and
3 --

4 [Laughter]

5 **MR. KELLEY:** We found a few patents there lying in the
6 gutter and took them down here and found people who are willing to
7 stand with them. And I've very pleased to say that last Friday we
8 tested our dish at 20 percent electric conversion efficiency
9 combined with 64 percent thermal efficiency. We produced both
10 industrial process heat of the type that we had at Tahachapi and
11 electricity.

12 Our experience at Tahachapi said you can't compete with
13 natural gas solar one to one, so we needed to add electricity to
14 the component, and we did that. The California Energy Commission
15 stood up and said we believe in you and we'll try it. And I've
16 had considerable patience from those who have dealt with my
17 contract, but we've produced it, and it's there.

18 And again a small company, the Wright brothers' plane
19 came out of a garage, and hopefully the world's finest solar
20 concentrator has just come out of a similar garage.

21 Thank you.

22 **CHAIRMAN IMBRECHT:** Well, you've identified some issues
23 that are important for us. We've certainly been aware of them for
24 some time.

25 I want to assure you that we share much of your

1 frustration. What you're referring to principally are state
2 contracting requirements that are imposed by the Legislature. And
3 that's one of the things that was at the heart of my comments at
4 the opening of today's session in terms of we can come forward
5 with those types of recommendations, but we're going to need the
6 political support of all of the players in the process.

7 **MR. KELLEY:** And please don't misapprehend my comments.
8 I'm not shooting at that process at all of those requirements.
9 It's just that when they're applied to a very small company on an
10 R&D basis --

11 **CHAIRMAN IMBRECHT:** I understand.

12 **MR. KELLEY:** It's a difficulty.

13 Thank you.

14 **CHAIRMAN IMBRECHT:** Thank you very much.

15 Mr. Peter Carroll, appearing Solar Turbines.
16 Commissioner Rohy's former employer. Good to see you, Peter.

17 **MR. CARROLL:** Mr. Chairman, Commissioners, thank you
18 very much for the opportunity to be here before you today.

19 First I'd like to commend you for being --

20 **THE REPORTER:** Excuse me, sir, could you also spell
21 your last name?

22 **MR. CARROLL:** Yes, C-a-r-r-o-l-l.

23 **THE REPORTER:** Thank you.

24 **MR. CARROLL:** Solar Turbines is a industrial gas
25 turbine. We manufacture our products in San Diego and are one of

1 the leading exporters from the State of California in heavy
2 machinery.

3 Let me get back to commending the Commission for being
4 among the very first to formally recognize the need to find
5 financial resources for continued R&D investments in a
6 restructured environment. I think the work that Mike has done in
7 his group, additionally your recognition that many of the new
8 generating sources that will find a home in the deregulated
9 community could be lumped under the umbrella of distributed
10 generation, and as such you've carried the banner forward to see
11 that distributed generation provides an easy access for these
12 technologies to enter the market. Because it's through that easy
13 access more than anything else that they'll be able to compete.
14 So removal of those barriers will do more than any other factor to
15 see that they benefit all of us within the state.

16 R&D is a key issue to us. We like to think of ourselves
17 as being a high tech company heavily dependent upon it. And we
18 have participated in state programs and federal programs. So I
19 speak from that background.

20 There are many pitfalls, and I would like today to talk
21 about the policies that you're about to undertake, some of those
22 pitfalls and suggest some solutions as you go forward.

23 It is a common and popular criticism of R&D to say that
24 all R&D should be funded by the marketplace and that the market
25 will determine where they go. Clearly that's true for near term

1 issues and for many many products, but that is not true, I think,
2 principally for public goods or longer viewed R&D that your
3 organization supports. The market horizon for companies such as
4 ours simply is not long enough to bring these into focus soon
5 enough.

6 I think we see that in the automobile industry as an
7 example, and I think we also see it in the environmental sector
8 and in the alternative fuels sectors.

9 Pitfalls, however, in this are in three principal
10 categories. The first is doing R&D for the sake of R&D. I can
11 tell you I have been a part of such an organization, and we kept
12 the work in the lab, and we did it for the sake of the lab. And
13 that's a luxury I believe that we can no longer afford.

14 The second pitfall is the building of large program
15 management or oversight organizations that put a heavy overhead
16 cost or administrative burden on the R&D investment making that
17 investment not provide the payback to the ratepayers that they
18 deserve.

19 The third and most significant category is that of
20 unrealistic market assessments for products. Time and time again
21 research engineers will apply an unrealistic fuel value or an
22 unrealistic market entry price for new product and as a basis for
23 assuming that that product or that technology can enter the market
24 case. Time and time again that fails. So it's very important to
25 have that realistic assessment.

1 Well, how do you do those things. How can you get at
2 that.

3 I would encourage you to look at partnerships not only
4 in doing this work but in selecting what is done in managing it.
5 A partnership with an industrial committee working with yours made
6 up of members of industry, of universities, of national labs to
7 help select the kind of technologies that should be pursued and
8 select the programs within those technologies as they go forward.

9 Similarly you may be well served, if you will,
10 out-sourcing the management of these dissimilar kinds of
11 activities. Universities, consortiums could help do that. And I
12 think it would be beneficial to all of us to have a broader based
13 oversight of where we go.

14 Finally cost sharing. I understand in the very
15 articulate and impassioned plea to support small businesses that
16 we just heard that funding is a significant issue, but I believe
17 that forcing entrepreneurs, large companies, people with novel
18 ideas out into the marketplace to dig and work for that funding is
19 as important as the development of the technology.

20 There are many many ways besides digging in your own
21 pocket or coming to before your organization for funding. You can
22 go to other states. You can go to the federal government. You
23 can go to investment capital people that would like to look into
24 those kinds of projects.

25 And I would encourage you to drive all of us that come

1 to the trough to get out there and prove the merit of our
2 technology by finding people that are willing to belly-up and put
3 their money along with yours to see that the project works. I
4 think that's going to be very important.

5 Finally I'd like to comment a little bit on the
6 requirements that you have on you. I recognize that you cannot
7 change these, but data sharing, MBE/WBE, a whole array of
8 requirements that were put in place at the time for very good
9 reasons, I believe it will encumber the development of
10 technologies that we need to develop under a very austere program.
11 So I would encourage you to, I guess, come to people such as
12 myself to say get out and lobby for that. But we need to have a
13 common message. We need to work together on that issue.

14 And I thank you very much for the time and the
15 opportunity to be here.

16 **CHAIRMAN IMBRECHT:** Thank you very much.

17 Mr. Jim Cole.

18 **MR. COLE:** Commissioners, my name is Jim Cole. I'm
19 Director of the California Institute for Energy Efficiency.

20 On behalf of the Institute I'm please to have this
21 opportunity to present some oral comments on the Notice of En Banc
22 Commission Hearing on Public Interest RD&D. We've not had time to
23 prepare detailed comments, but we look forward to participating in
24 the Commission's process for developing a multi-year plan for
25 public interest RD&D in California.

1 California Institute for Energy Efficiency is a
2 partnership of the California Energy Utilities, its regulatory
3 commissions and the University of California. We're administered
4 as an organized research unit of the University of California
5 located at Lawrence Berkeley National Laboratory. The Institute
6 plans, funds and manages research and development of new end use
7 efficiency technologies by leading scientists, engineers and other
8 principal investigators at California's universities, colleges and
9 national laboratories.

10 Over the '90 through '97 time period, California's major
11 electric and gas utilities have provided an average of about three
12 to four million dollars annually to support the institute and its
13 R&D programs. Over that period we reviewed as a component of the
14 utility R&D programs complimentary to the other activities that
15 the utilities were sponsoring.

16 Of course now in the future environment we'll no longer
17 be viewed as part of their program but presumably working with the
18 Energy Commission as part of the public interest R&D program
19 generally.

20 Exactly what our mission should be in the future perhaps
21 could change rather than the particular niche that we served. Of
22 course we want to emphasize the capabilities of those scientists
23 and engineers as part of, perhaps, a broader industrial public
24 interest partnership.

25 The Energy Commission is represented on the Board of the

1 Institute by Commissioner Sharpless. We're very pleased to have
2 her participating. Technical direction and major decisions about
3 the funding of our programs are provided by our research board
4 consisting of vice presidential level representatives of
5 California's major utilities, a PUC Commissioner and Energy
6 Commissioner and the Executive Director of the California Building
7 Industry's Association and other top level managers of R&D
8 organizations including the Electric Power Research Institute.

9 I'd like to comment briefly about the proposed RD&D
10 planning approach. Although Appendix C of the Hearing Notice does
11 not address the issue explicitly, I believe that it's inevitable
12 that the planning process will address the administration and
13 expenditure criteria issues. And I'm happy to hear from Ron that
14 that will be part of the discussions.

15 This topic was addressed at length at a recent meeting
16 of the CIE Research Board on September 27. A special focus of our
17 discussions was a mechanism that appears to offer significant
18 potential for efficient administration. This is the establishment
19 of a joint powers authority such as one described in the working
20 group report that would utilize the powers executive leadership
21 and key Staff of the California Energy Commission, the California
22 Public Utilities Commission and the University of California and
23 perhaps other organizations.

24 The Research Board members received some preliminary
25 information about the joint powers authority approach and its

1 potential merits. The CIE Board encouraged CIEE and the
2 University of California to develop this idea further and to
3 discuss it with all of the interested parties. We see the
4 Commission's planning process as one venue for these discussions.

5 At the September 27 meeting the CIE Board also directed
6 me to begin our multi-year planning process for 1997. In this
7 process we'll set the direction of our '97 research program and
8 explore the means by which we can integrate our existing
9 multi-year focused R&D program, our exploratory R&D program and
10 our collaborative program planning and funding approach into the
11 new public interest RD&D program in 1998.

12 It seems natural and productive to coordinate this
13 planning effort with a planning process that the Commission has
14 proposed. We have already suggested such coordination to the
15 Commission Staff and received a generally positive response. So
16 we think that that will happen naturally.

17 I do have one comment on the proposed topics for the
18 RD&D planning approach. It appears to relate primarily to
19 technology, research and development issues. While an emphasis on
20 technology development is very appropriate, it is important that
21 the plan also identify the need for research on specific problems
22 where new knowledge is needed prior to allocating significant
23 funding for specific technological solutions.

24 And I'll give just one example to illustrate the
25 potential for that. Several years ago we launched a major effort

1 to measure the performance of thermal distribution systems in
2 residential buildings in California, and we found out that the
3 systems were very inefficient. About 25 percent to 30 percent of
4 the energy was lost due to leakage in the duct systems, conduction
5 losses and pressure imbalances within the building envelope.

6 As an R&D organizations nationwide we've put lots of
7 funding into developing very high efficiency air conditioners,
8 very high efficiency furnaces, and we, to get 90 percent
9 efficiency in the case of furnaces, and we connect them up to
10 distribution systems where we leak more than 25 to 30 percent of
11 the energy, and so I think the R&D needs to look at some research
12 questions to get an understanding of really where are the, in the
13 case of energy efficiency, where are the energy inefficiencies and
14 where can we allocate the funding to the most appropriate place
15 and prove efficiency.

16 Commercial buildings, thermal distribution systems in
17 commercial buildings we speculate don't work very well. We've had
18 very limited resources to do the equivalent measurement activities
19 in those buildings. We think that's something that the public
20 interest R&D organization needs to do.

21 There are other examples in my comments of research
22 questions that perhaps should be very much on the agenda of the
23 public interest R&D organization.

24 In summary, we're planning to participate very actively
25 in the CEC's multi-year planning effort, both in terms of our

1 current projects as well as reaching out to other principal
2 investigators at California universities, colleges and affiliated
3 laboratories that we have traditionally worked with to bring
4 project ideas and customers and consumer benefit information to
5 the table.

6 Thank you very much.

7 **CHAIRMAN IMBRECHT:** Thank you, Mr. Cole.

8 Next Cindy Sullivan, an alumnus of the Energy
9 Commission. Welcome back.

10 **MS. SULLIVAN:** I'm Cindy Sullivan with the Technology
11 Advancement Office of the South Coast Air Quality Management
12 District. And my boss, Dr. Chung Lu [phonetic], Assistant Deputy
13 Executive Officer of the District, has asked me to come here today
14 to offer any support and assistance that the Technology
15 Advancement Office can give to your staff in formulating and
16 implementing the renewables and the RD&D activities.

17 We would also like to suggest to you that the
18 possibility of holding one or two of your workshops or hearings in
19 Southern California so that the interested parties in that part of
20 the state could fully participate.

21 Thank you.

22 **CHAIRMAN IMBRECHT:** I think we have every intention of
23 taking this show on the road.

24 Next Jamie Khan, I believe it is. Texas Ohio again,
25 yes.

1 **MR. RHOADS:** Jamie Khan was here just a couple of
2 minutes ago. Why don't you pass her and come back again.

3 **CHAIRMAN IMBRECHT:** I'll call her again in just a
4 moment.

5 Dr. Aitken, Union of Concerned Scientists.

6 **DR. AITKEN:** Good afternoon. This is partly by way of
7 apology to let you know that you've got an extraordinary triple
8 header going on right now. I just flew in from the UPVG meetings
9 in Denver, as I'm sure you're aware of that, in time to give a
10 talk at SMUD as part of their energy forum and time to come over
11 here. So you've got all three things going simultaneously.

12 One of the things that happened was important at UPVG in
13 Denver was the announcement by Department of Energy that the funds
14 for the team-up joint venture program basically are not going to
15 be available this year. And that whole program is going to be
16 delayed by one year. And what it underscored to me more than
17 anything was the importance of the continuity to the R&D and to
18 the market transformation coming from the states. There has to be
19 continuity coming from somewhere.

20 And while the DOE was obviously very concerned about
21 that, when you have such unreliable sources of opportunities for
22 people to try to get good work done, it doesn't work. And I think
23 one of the important things in California has been the wonderful
24 continuity provided by the CEC and all of you whom I know.

25 I participated with Mike DeAngelis on the R&D working

1 group. Was very very impressed by the way the open minded and
2 fair minded way that that group approached its tasks and came out
3 with various options that can be considered. And the one thing
4 that was clear to everyone is that continued vigorous research and
5 support of what we call public goods R&D is absolutely essential
6 to a healthy economy. A healthy business economy, a healthy
7 California economy, a healthy environment. Absolutely essential.

8 And it's just a matter of finding out the right
9 techniques, the right balance of the funding; but it simply must
10 be supported. We must come out of this with an excellent proposal
11 back to the Legislature in support of that.

12 There are 13,000 members of the Union of Concerned
13 Scientists in California, and I am their representative as an
14 intervenor in the process. And they are good folk all saying the
15 same thing. That we really have our future in our hands. We
16 can't count on the federal government. We need to continue to
17 have really an excellent program.

18 So I won't offer, I apologize as I've just walked in,
19 more specific suggestions. I can give you better detailed written
20 stuff, as you've all seen, as we get farther into it. But thank
21 you very much for holding this hearing and hearing me out.

22 **CHAIRMAN IMBRECHT:** Thank you.

23 Carl Blumstein or -stein?

24 **MR. BLUMSTEIN:** Mr. Chairman, you had the pronunciation
25 correct the first time. That's Blumstein, but I do appreciate the

1 opportunity to have my name adjusted by you as well.

2 [Laughter]

3 **MR. BLUMSTEIN:** The university applauds the
4 Commission's move to get going with AB 1890 and do it in an
5 expeditious way. We'll participate fully in the Commission's
6 process, and we hope we can play a constructive role.

7 We have been strong advocates for public interest R&D at
8 this Commission, at the Public Utilities Commission and also at
9 the Legislature, and I think we will continue to do that.

10 We believe that the outline of the RD&D plan in Appendix
11 C should be expanded to address the RD&D administrative and
12 expenditure criteria to be established by the Legislature pursuant
13 to Subdivision F, Section 381 of the Public Utilities Code. A
14 report on this topic should be prepared by March 31st, 1997, to
15 provide timely information for the Legislature.

16 Now a little preaching to the choir I think is that AB
17 1890 gives the California Public Utilities Commission some
18 authority over public interest RD&D funds. And an efficient and
19 productive public interest RD&D program depends critically on
20 coordination and cooperation between the two Commissions. We urge
21 both Commissions to take steps to ensure that the coordination and
22 cooperation are hallmarks of the processes used in implementing
23 the RD&D provisions of AB 1890.

24 Thank you.

25 **CHAIRMAN IMBRECHT:** Thank you.

1 We hear message.

2 All right. Try Jamie Khan again please. Did anybody
3 see her come back in?

4 **MR. RHOADS:** She won't be here. She had to leave.

5 **CHAIRMAN IMBRECHT:** She left. Okay. Mr. Lloyd Cluff
6 to be followed by Betsy Krieg. Two more representatives from
7 PG&E. Welcome.

8 **MR. CLUFF:** I'm here with my hat on at PG&E. I have
9 another card in there.

10 **CHAIRMAN IMBRECHT:** I see that.

11 **MR. CLUFF:** We'll deal with that later.

12 **CHAIRMAN IMBRECHT:** You tell me which one you want to
13 use first.

14 **MR. CLUFF:** Well, let me use the Seismic Safety
15 Commission first. I'm here as the Chairman of the California
16 Seismic Safety Commission. I'm also the Utilities Commissioner on
17 that Commission. Have been for the last 12 years. And I'm
18 Chairman of the Commission's Research Committee.

19 So I just want to say that we're here to offer our
20 cooperation to help focus on seismic risk issues and so forth, and
21 we'd like to work with your Staff and Executive Director on seeing
22 how we might help in that public interest RD&D.

23 Right now our Commission is in the process of writing
24 the next five-year plan for the State of California on earthquake
25 risks and risk reduction activities. That will be due to the

1 Legislature and the Governor in April of next year, and this would
2 be a good time to make sure the policies with regard to the
3 initiatives having to do with these activities are in concert with
4 what you like to do.

5 So I offer our cooperation.

6 **CHAIRMAN IMBRECHT:** We thank you for that. I would
7 urge you to try to work with our Siting Division that primarily
8 oversees some of those issues for us.

9 **MR. CLUFF:** Okay, I will. Now let me change hats.

10 **CHAIRMAN IMBRECHT:** Okay.

11 **MR. CLUFF:** I'm here as the new Manager of Research and
12 Development for PG&E. I have two departments now. I manage the
13 Department of Geo Sciences which has to do with earthquakes at
14 PG&E.

15 So I've taken on this added responsibility, and I'm just
16 new in this job just having assumed these responsibilities a few
17 days ago. So I'm learning. I came here mostly to learn, but
18 Betsy Krieg, one of my directors from our group that's been on the
19 working group, is here. And I'd like her to make a few comments.
20 She has some written material to leave you, and she doesn't need
21 to go through all that. She can just give you the conceptual
22 ideas, and that will be it.

23 Thank you very much.

24 **CHAIRMAN IMBRECHT:** Thank you.

25 **MS. KRIEG:** Commissioner Imbrecht, other Commissioners,

1 thank you for letting us talk today a little bit about R&D. We've
2 been talking about R&D for the last nine months, 24 months, a long
3 period of time.

4 I'm Betsy Krieg. I'm the Director of Planning with
5 Pacific Gas and Electric Company.

6 We had a few procedural comments we wanted to make, but
7 mostly we wanted to commend you and your Staff for the great job
8 that's been done over the last few months in their participation
9 on these informal working groups for R&D. Mike DeAngelis and a
10 few other people, like quite a few, were very helpful in keeping
11 the RD&D working group on track and maintaining the collaborative
12 spirit that the RD&D working group had throughout its entire
13 efforts. And we want to commend you for maintaining that spirit,
14 going forward in your suggestion about informal procedures and
15 getting a lot of information out on the table.

16 We have two suggestions. One is we discovered during
17 the working group report the informal procedures are really good
18 for developing ideas, very difficult to use that same
19 consensus-based approach to make decisions. So we'd like to see
20 you add, which I suspect you were going to do, that formal part to
21 the informal proceedings. Let the working groups come together,
22 come up with ideas on goals and objectives, and then have some
23 sort of formal procedures where we can all take off our
24 collaborative hat, put on our partisan hat and talk about some of
25 the more contentious issues.

1 As we discovered in our working group once you agreed to
2 put the contentious issues aside and you agree to discuss them
3 some place else, you get a really good selection of ideas that
4 everyone can get very excited about coming up with a range of
5 issues. And that's what we'd really like to see as we move
6 forward in the implementation of the R&D program.

7 The other issue that I just wanted to touch on is that
8 the Staff has suggested putting together a multi-year R&D plan.
9 PG&E has done much planning throughout the years, and our
10 experience is that plans tend to get very fixed and inflexible.
11 So in the spirit of continued collaboration and cooperation
12 suggest you adopt something like an R&D agenda. Try to lay out
13 the goals and objectives as Mike and Ron mentioned today. We need
14 to have an idea of where we're going but try to avoid getting
15 everything signed, sealed and delivered within the next seven to
16 nine months. I think that's virtually an impossible task.

17 At the same time I think the groups and the interested
18 parties can reach agreement on what sort of public interest R&D
19 could usefully be done over the next four or five years, at least,
20 and we can get behind that without yet arguing about all the
21 details of the administration.

22 And as you've heard from everyone, there are a lot of
23 concerns about potential high costs of administering new
24 programs. And there are several suggestions in the R&D working
25 group, and you've heard several others today about ways to

1 minimize that administrative burden. And PG&E, just being a very
2 low administrative organization, would support those sort of
3 ideas.

4 Thank you very much.

5 **CHAIRMAN IMBRECHT:** As illustrated by your presence.

6 [Laughter]

7 **CHAIRMAN IMBRECHT:** We thank you for those comments. I
8 want to stress that I think all of us welcome the collaboration
9 concept and an effort to try to winnow the issues down.

10 It's pretty clear from today's entire hearing that we,
11 as I said at the front end of the discussion, we have a lot on the
12 plate, and so we welcome your help and support.

13 Let me inquire now does anyone else wish to address
14 RD&D?

15 Yes, Marv.

16 **MR. LIEBERMAN:** Mr. Chairman, just very briefly. I
17 forgot to mention that we did file comments in the renewables
18 docket, and I didn't want to take up time this morning. But just
19 to make sure there's no misunderstanding, EPRI's comments in
20 renewables are contained in the written comments that we filed
21 today. And we'll be working with that group also.

22 **CHAIRMAN IMBRECHT:** So noted. Thank you.

23 Yes?

24 **MS. LUCKHARDT:** I just have three quick points. Jane
25 Luckhardt again. Three quick points on RD&D.

1 I believe that the RD&D plan needs to address or define
2 success and so that when you're analyzing programs you can really
3 look at them practically to determine whether you really can reach
4 a success. Because there's just so little money allocated to
5 RD&D, to this whole program, that it really needs to be very
6 practical.

7 And I think that the Staff should work specifically with
8 industry and within their own staff to determine and help define
9 what projects really will have practical solutions with this
10 limited amount of money.

11 And as a last point, I believe the plan should also
12 address to a small extent creating a real market within California
13 such that RD&D successes can compete and become a part of the
14 electricity market in California.

15 Thank you.

16 **CHAIRMAN IMBRECHT:** Thank you. Further comments?
17 Drake.

18 **MR. JOHNSON:** Thank you again. My name is Drake
19 Johnson. I'm representing Southern California Edison. I checked
20 the "all" box, I think, on there.

21 **CHAIRMAN IMBRECHT:** But got lost in the stack.

22 **MR. JOHNSON:** Got lost in the stack.

23 I'd like to reiterate something that's been said before.
24 I think that clearly that the CEC's Staff participation in the R&D
25 working group is admirable. That group has been operating over

1 about a two-year period, and I think we have developed a number of
2 consensus issues. I think it's true the comments that have been
3 made earlier about the open process.

4 Once again we are here to continue our support in that
5 effort and will do so. We think that the issues that have been
6 laid out in the En Banc Notice are on target, and we will proceed
7 with that. Clearly there's some room for definition and
8 evaluation, and I think the proceedings that will move forward
9 will do that. And we look forward again to participating with the
10 Staff and the other stakeholders in this process.

11 **CHAIRMAN IMBRECHT:** Okay. Thank you.

12 Further comments?

13 My, my, we've come to the --. Yes, I want to thank
14 everyone for your participation. As I mentioned, we do have an
15 order for consideration in terms of assignments. I also again
16 want to emphasize the fact that I would expect that there'll be a
17 lot of cross-fertilization with all five of us participating not
18 only in the committees that we're assigned to but in terms of
19 other committees as well.

20 So let me throw this open for discussion. There is one
21 typographical error. The opening paragraph says, "Pursuant to
22 Section 25111." It's actually 25211 I am informed.

23 I welcome any further discussion, or we can put this up
24 for consideration.

25 **VICE CHAIR RAKOW:** Do you need a motion on this?

1 **CHAIRMAN IMBRECHT:** Yes. Yes, we do.

2 **VICE CHAIR RAKOW:** I would like to move that we adopt
3 the following Commission policy committees and structure that are
4 in the Draft 10/16/96 in the matter of our internal management
5 procedures.

6 We don't have to go through all the assignments?

7 **CHAIRMAN IMBRECHT:** No, we've done that.

8 I'll second it.

9 And let me also just indicate that all those we
10 currently had on our mailing list for all three dockets and those
11 that have submitted forms today will receive a copy of the order
12 as expeditiously as possible.

13 So, if there's no further discussion, what's the
14 pleasure of the Commission?

15 Is there objection to unanimous roll call? Hearing
16 none, Ayes, five; No's, none.

17 Is there any other business to come before us?

18 Thank you all again. It's been a long day. I think
19 we've all shown a great deal of stamina. We look forward to your
20 continued participation.

21 We stand in adjournment.

22 [Whereupon the proceedings adjourned at approximately

23 3:40 P.M.]

1 CERTIFICATE OF REPORTER

2 I, **S. RICE**, a duly commissioned Reporter of
3 **CourtScribes**, do hereby declare and certify under penalty of
4 perjury that I have recorded the foregoing proceedings which were
5 held and taken at the **CALIFORNIA ENERGY COMMISSION** in Sacramento,
6 California on the **16th day of October 1996**.

7 I also declare and certify under penalty of perjury that
8 I have caused the aforementioned proceedings to be transcribed,
9 and that the foregoing pages constitute a true and accurate
10 transcription of the aforementioned proceedings.

11 I further certify that I am not of counsel or attorney
12 for any of the parties to said hearing, nor in any way interested
13 in the outcome of said hearing.

14 Dated this **23rd day of October 1996** at Foresthill,
15 California.

16
17
18 _____ //signed// _____

19 **S. RICE**

20 **REPORTER**

21